SimView Server User Guide

The Administrator's User Guide

Version 5.0.6

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1 Introduction

The User Guide includes comprehensive step-by-step instructions and illustrations for using SimView.

All supplied user manuals and labeling from original manufactures should be followed.
The SimView user guide does not supersede those from the original manufacturer.

Check www.laerdal.com for newest version of this User Guide.

1.1 Before you start installing

1. Have all actions from the "Presales Questionnaire and site survey" been solved successfully?
2. Is the Network infrastructure ready with the camera(s) connected?
3. Unpack the boxes and check that everything is delivered and undamaged, so that you have all the needed parts ready before start.
4. Read the documentation before you start.

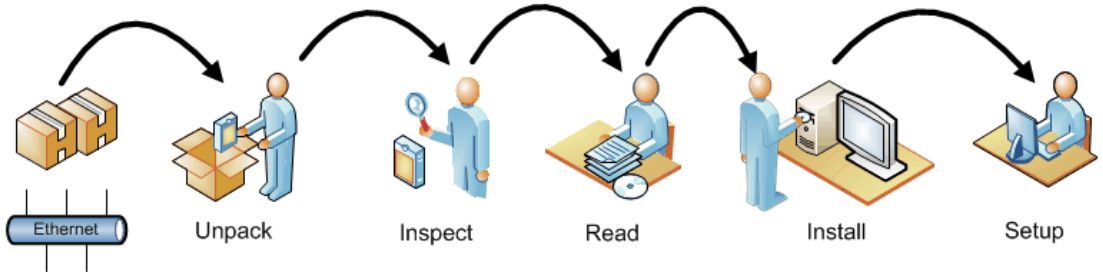


Figure 1

1.2 Quick installation overview

The following is a quick overview of the steps needed to setup the SimView system.
They are only relevant if you are not having a Laerdal Representative to assist you with the installation.

1. If you ordered the cameras together with the SimView, the first thing to do is to install the cameras in the planned places and connect them to the Ethernet, if you already have the cameras in place then go to step 2.
2. Install the PC and connect it to the Ethernet.
3. Connect keyboard and mouse to the PC.
4. Connect your USB web-camera if needed to a USB port on the PC.
5. Connect the microphone to the PC.

2 Cautions and warnings

- By using this product, Laerdal® Medical does not condone the use of this system for violating any government, state or local laws or personal rights.
- This product contains software that may be installed to other computer systems that may allow remote visual and audio monitoring. Allowing access to private networks and the recording of unannounced conversations may be a violation of personal rights. It is recommended that individuals in the areas of recording equipment be made aware of the installed equipment and to the fact that there conversations and activities could be viewed and recorded without notice.
- It is not advised to use this system as a means of physical security for the protection of public or private property.
- Laerdal® Medical will not be responsible for loss or stolen property due to the use nor failure of operation of this equipment.
- Read understand, and follow all equipment instructions, safety warning and guidelines before operating SimView and all associated equipment.
- Do not use cables or connectors with bent pins or visible damage.

2.1 Warranty

Please refer to the enclosed printed Laerdal® Global Warranty or www.laerdal.com for terms and conditions.

3 Important Note

3.1 SimView Security and Privacy concerns

This document is meant to address concerns regarding SimView privacy and security.

3.2 Whose responsibility is it to secure the SimView Server?

The SimView server system is by default not configured with any firewall or antivirus software.
It is the customer's responsibility to install such software and to include the PC in the normal Domain policies on the network. Furthermore, it is also the customer's responsibility to keep the PC's updated with the latest security patches.
This is due to the fact that once the PC is installed at the customer site; Laerdal has no control over the PC and therefore cannot be responsible for maintaining security.

3.3 Anti-virus and Firewalls

The PC is not supplied with an anti-virus program. *Windows* firewall is not activated by default. It is the customer's responsibility to protect the simulation system components from unauthorized access.
Tip! For more information on changing the firewall setting see the maintenance chapter (7).

3.4 Privacy

Content stored on the SimView server cannot be accessed without proper login credentials. Three types of login exist to get access to the stored simulations. One type grants access to change the configuration, delete files and edit logs and the other types only grants access to view the simulations and live video feed without being able to change the configuration.
You can create as many users as needed on the system.

It is important to understand that there is no filtering done on the logins, which means that all SimView content can be viewed by everyone with a valid SimView login.
Note! It is important to note that the SimView login names and PC user names are not the same; there is no link between a SimView login name and a PC user. The user logged into the PC may use another SimView login name that the user name used for logging into to the PC. There may be many more SimView login names/users than PC login names on the SimView server. SimView users will often log in from a remote PC to the SimView software.
Note! All SimView users can access all the recordings.
Note! Some regions have laws or regulations stating that rooms under video/audio surveillance must be properly marked with a sign or similar. Please make sure you are complying with your local regulations.

3.5 Unauthorized access to SimView content

The SimView server software is, as mentioned in the Privacy section above, designed to prevent access to the content if a user does not have a loginHowever it cannot be guaranteed that unauthorized access to content is not possible. SimView Server should consequently never be exposed to the Internet without a firewall.
Securing the PC with the proper Domain policies and restrictions is therefore needed and should be planned with customer's IT administrator if the PC is to be connected to the local network.
Proper polices for exporting and securely storing files should therefore be implemented and carried out if deemed necessary.
It is also possible to isolate the SimView server and connected peripherals such as cameras and Instructor Application PCs on a separate network in order to minimize risks.

If your site wishes to restrict access to SimView Server and access to record simulations there are some key points to adhere to:

- Never let the browser save the password when logging in to SimView as administrator.
- Don’t use the ***Remember me*** function.

These points may not be valid to your site if access to the SimView Server is physically limited.

3.6 Axis IP Cameras

The cameras supported by SimView can be accessed over the network and should be secured with passwords to prevent unauthorized access to the live streaming video. Laerdal has no control over this software and relies on the vendor and user to securely protect access.

3.7 File security and backup of data

The customer is responsible for file security and backup routines for all simulation session data. All use and storage of simulation session data should be in accordance with local rules, regulations or laws, and is the sole responsibility of the customer. See more on backup in sections 5.2.2 on page 13 and 7.3 on page 41.

4 Setup

Note! Any USB devices must be setup properly on the SimView Server PC before they are accessible by SimView. If you have trouble, please check that drivers are properly installed.

4.1 Computer name

To make it easier to access the SimView Server from other PC's on the network, you can give the server PC a name that is easy to remember. The PC name is setup in the windows control panel for System and Security, under System. Change the Computer name to suit your needs.

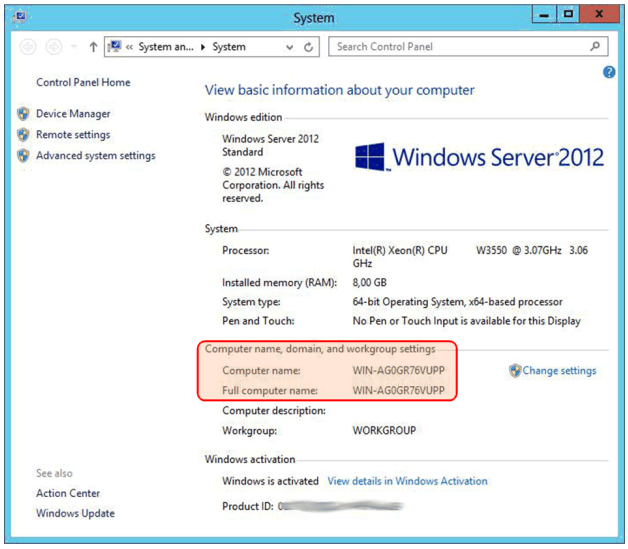


Figure 2 The System Control panel showing the Computer name.

4.2 Microphone installation

1. Plug the microphone jack into the audio input port, if using Louroe, use the microphone input.
2. Open Control Panel from the Start button
3. Select Sound
4. Select the Recording Tab
5. Select the microphone you want to use and select Properties.
6. Under the Levels Tab you can adjust the recording level, set the level at press OK.
7. Now test if the level is adequate, by looking at the bar level in the window while speaking.

You will be able to add other audio sources via the SimView setup page as well, not only the Windows default, if you want to change set-up.

4.3 External Audio Equipment

If you are using external mixers for multiple microphones etc., the installation is very similar to the simple one microphone setup. The external audio equipment is connected either to the microphone input or the line input via a 3.5 mm jack. When using external single channel audio equipment, you will have to select the correct one when setting up the audio. In the audio setup you can clone from right or left channel to suit your setup, the cloned channel will be copied to both channels for recording and playback. SimView Server also supports stereo recording.

4.4 USB Web-camera install

Laerdal recommends using new models and particularly, Logitech USB-web cameras.

1. Plug USB web-camera into a free USB port.
2. Install the supplied software and configure it according to the supplied user guide.
   This may not be needed for all types of USB cameras!
3. If the web-camera includes a microphone, you will have the possibility to use it instead of any other installed microphone.

4.5 LLEAP integration

When using SimView Server together with LLEAP, first start the LLEAP application on the instructor PC.

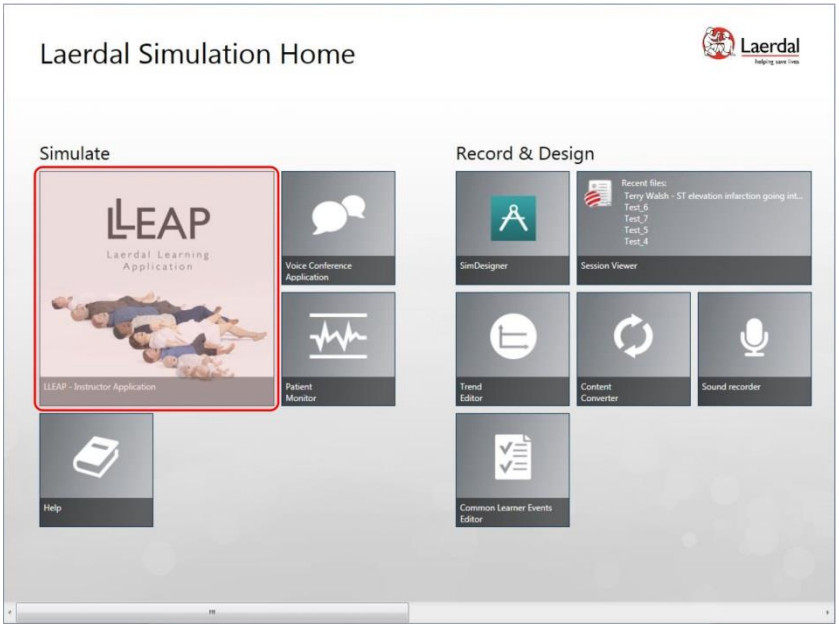


Figure 3 The LLEAP home screen

To start a simulation session click the LLEAP tile, as show above, this will open the pop-up window shown below.

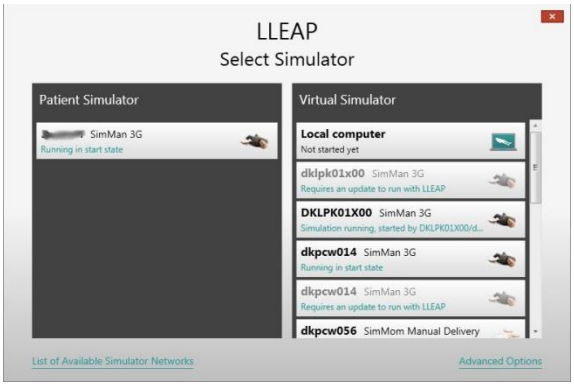


Figure 4

Select the simulator you want to use for the session, either a virtual or physical simulator. The simulators on your network will appear in the window. In this example one physical simulator is shown with several virtual simulators.

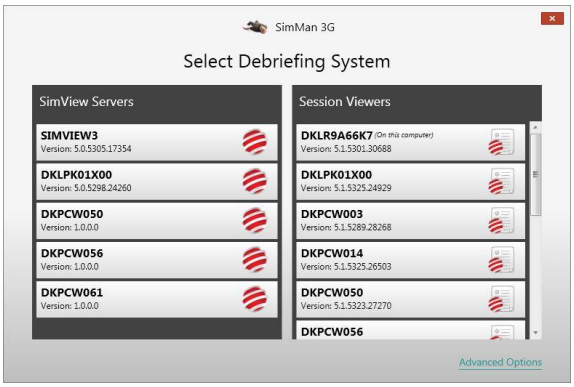


Figure 5

You now have to select the SimView Server to use for the simulation session. If you have multiple SimView Servers on your network, they will appear here. Click the one you wish to use.
Then this window will pop up for you to start a manual or automatic session.

Figure 6

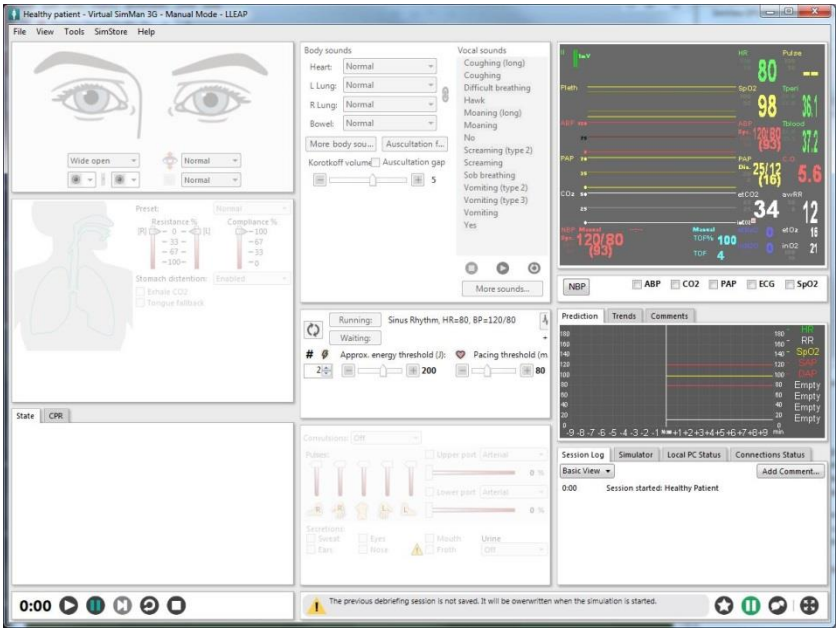


Figure 7

You now have the simulator on your screen on the instructor PC. Here you can start and stop the session.

For more information on the recording procedure see chapter 6.6 Recording using LLEAP.

4.6 Legacy Instructor Applications integration with SimView Extension

If you are using SimView with legacy Instructor Applications, like SimMan, SimMan3G etc. you must install the ***SimView Extension Configuration tool on the PC running the Instructor Application*** and configure it according to your needs and the guideline described in this guide.

This is also the process you need to perform if you have updated from AVS. The video settings in the Instructor Applications have to be changed in order to use SimView instead of AVS Video Server. If you should want to use AVS again, just change the video setting back to the old values and remove legacy support in SimView Extension, see Figure 8.
You can use the IP address or the name you have entered as the Computer name in the Control panel instead of the IP address, see chapter 4.1.
Use the ***Test connection*** button to make sure you have the correct server address, then press ***Save and close***.
Note! SimView Extension must be installed **after** all other Laerdal software like the simulators SimMan3G, SimMan etc. and the Laerdal Debrief Viewer.
Note! After reinstalling or upgrading your Instructor application, you must reinstall the SimView Extension program.

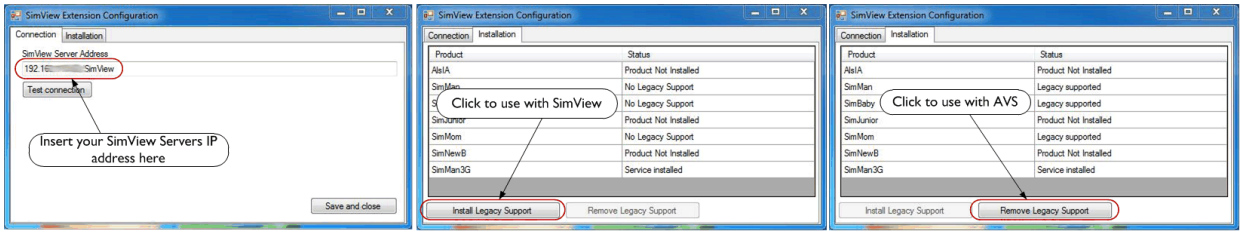


Figure 8 The SimView Extension setup windows

4.7 Legacy simulator setups for use with SimView:

The setup for the different types of simulators is shown in the next two chapters.

4.7.1 Setting up SimMan3G and SimMan Essential:

SimMan3G and SimMan Essential use the same setup.
The next two pictures show how to setup the service.

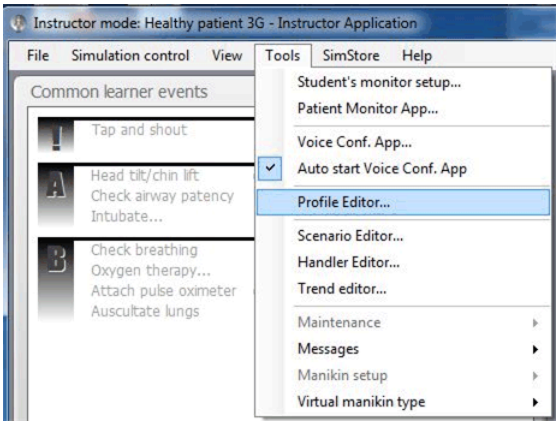


Figure 9 SimMan3G Extension Service, select the Profile Editor

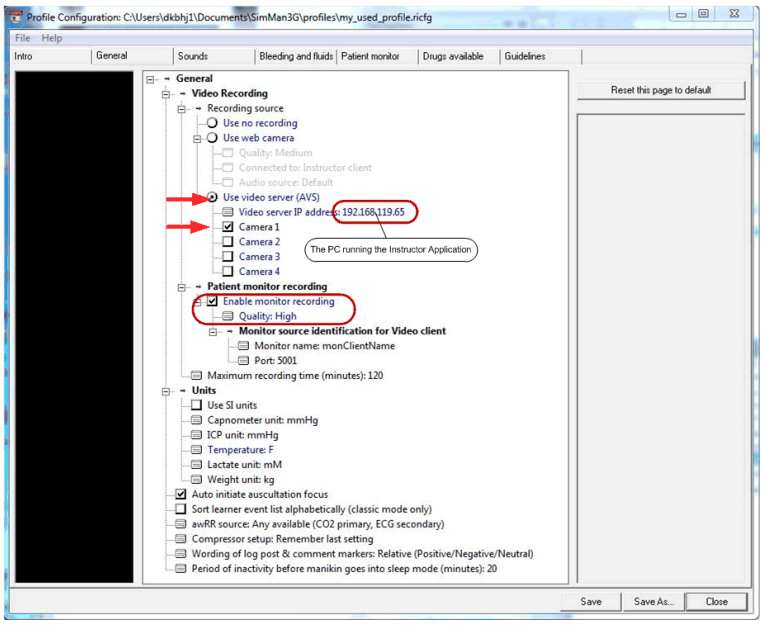


Figure 10 The Profile editor setup for the SimMan3G

- Enable ***Use video server (AVS)***
- Insert the IP address, ("localhost" or "127.0.0.1" is not allowed) for the PC running the Instructor Application.
- Enable monitor recording
- Set the quality to High, screen size on patient monitor not to exceed Full HD (1920x1080 pixels) Use the ***Save as..*** to save the profile and the press ***Close***
- You must the start a new session in order to use the new profile.

Tip! When SimMan3G starts, you can make sure that the profile you saved is the one that is used for the session:

Figure 11 The SimMan3G start screen showing the profile used

4.7.2 Non SimMan3G setup

The setup for SimMan, SimMom, SimJunior Advanced, SimNewB Advanced for SimPad, ALS Advanced for SimPad, SimJunior for SimPad and SimBaby is different as seen on the next illustration

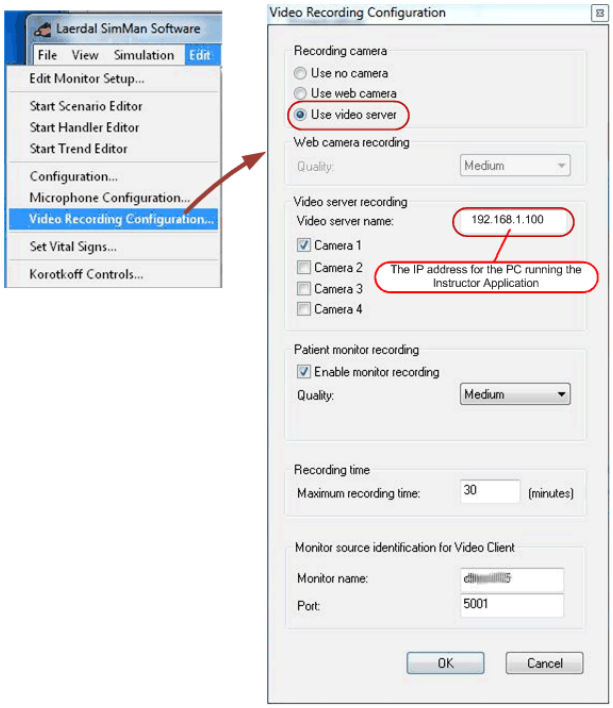


Figure 12 The SimMan setup

Tip! If you experience connection problems between the Instructor Application and SimView, after the setup, make sure that the Laerdal SimView Extension Service is started, and configured properly. You can check by using the ***Component Services*** tool. Go to the Start menu and write services in the search field; select the ***Component Service***. Under the ***Services (Local)*** you should see ***Laerdal SimView Extension Service***. If the status is not running, then press the ***Start*** button in the top left side of the services listing. You can also use the SimView Extension to check the connection and the service, as both will be checked when the ***Test connection*** is used.

5 SimView

5.1 Software installation

The SimView server PC will be supplied with the software pre-installed.
The first time you want to access SimView, you can do so by following these steps:
A default administrator user is already created with the following login information:
User: `admin`
Password: `Laerdal1`
Important! You should change the password for this user once you are ready to use the system!

On the desktop you will see the SimView application icon.
To start the SimView double click the SimView icon on the desktop:

5.2 Configuration

In order to use SimView, you will have to configure equipment; microphone, cameras, patient monitors etc. This is done in the ***View & Setup*** page.

5.2.1 Users

In order to use SimView Server, users have to be added.
There are three types of users:

- Administrators
    - Can change equipment configuration, add users, change SimView settings, record sessions, see recordings, delete recordings, make annotations during sessions and see live view.
- Instructors
    - Can change equipment configuration, can record and view sessions. Make annotations during sessions and see live view.
- Users
    - Can view recordings and live view.

To add users you must login as administrator, using the username and password you have chosen in the previous steps.

1. Click the ***VIEW & SETUP*** button (1).
2. Click the ***Settings*** (2) triangle to expand the server settings pane.
3. Click the User administration (3) this will open an input window where all details about the user can be entered.
4. Fill out all the fields (4)
5. Click the ***User type*** radio button (5) to give the user a role.
6. Click the ***Create*** button (6)
7. Close the input window by clicking the ***VIEW & SETUP*** button (1)

Figure 13

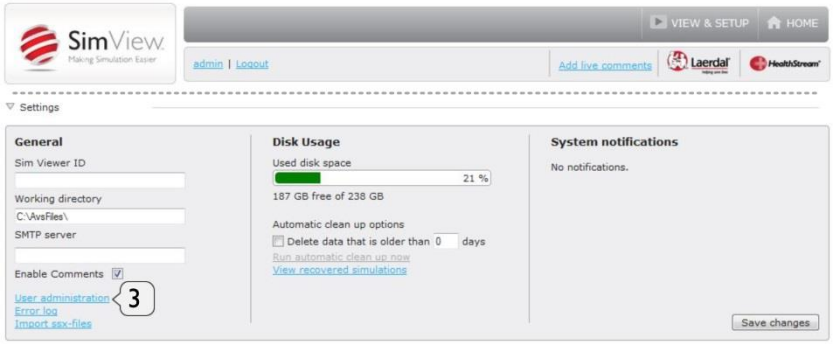


Figure 14

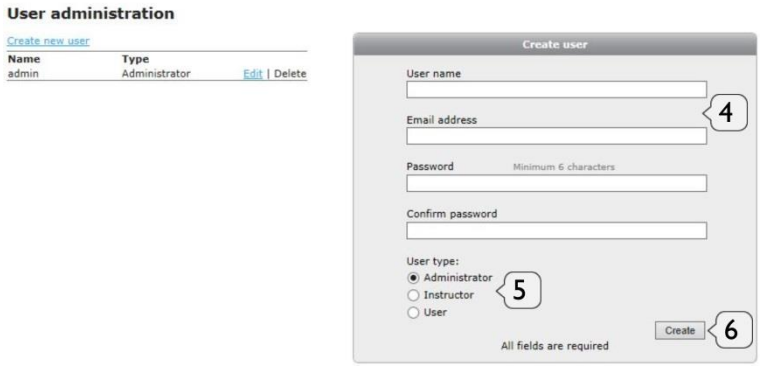


Figure 15 The user creation window

Note! If no SMTP server address is setup it will not be possible to **easily** reset a lost password **via email** for any account including the administrator account in SimView. See below in "Settings - General" for more info on how to setup the SMTP address. If you have lost the **administrator** password, and don't have an SMTP server setup, then call your Laerdal technical support.

5.2.2 Settings - General

Under server setting, the address of a SMTP mail server can be added in order to get a mail with a password reset, in the event that someone has forgotten the password (see Figure 14). If the address is not present, only Laerdal support will be able to help. Add the address in the field ***SMTP server***, and press ***Save changes***.

In the server setting pane you can also add a server name and the directory for saving the simulations. If nothing is entered for the ***Working directory***, the default `C:\Avsfiles` will be used. If the server has an extra "`D`" drive installed, then it is beneficial to add the directory "`Avsfiles`" with the "Windows Explorer" in the root directory on the "`D`" drive and add it in the ***Working directory*** as `D:\Avsfiles`

5.2.3 Server settings - Storage

Since SimView Server records high quality video, the system will run out of space eventually and it is important to actively decide on whether older simulations should be backed up or simply deleted.

A backup strategy must therefore be made on how to store old simulations and prevent data loss in the event of a hard disk failure.

The data storage strategy can be set in the server settings frame. See Figure 14.

Simulations can be exported to external disk storage by using the export function. When exported they are also ready for use with the Session Viewer application.

Note! The need for space depends on how the video quality is setup. The use of full high definition video takes up much more space than normal standard definition video, but the quality of the video may be sufficient for many purposes. See also page 14.

The server settings only offer the possibility to delete by date. If this is not what you want you will have to manually export or delete files. To do this, go to the home screen:

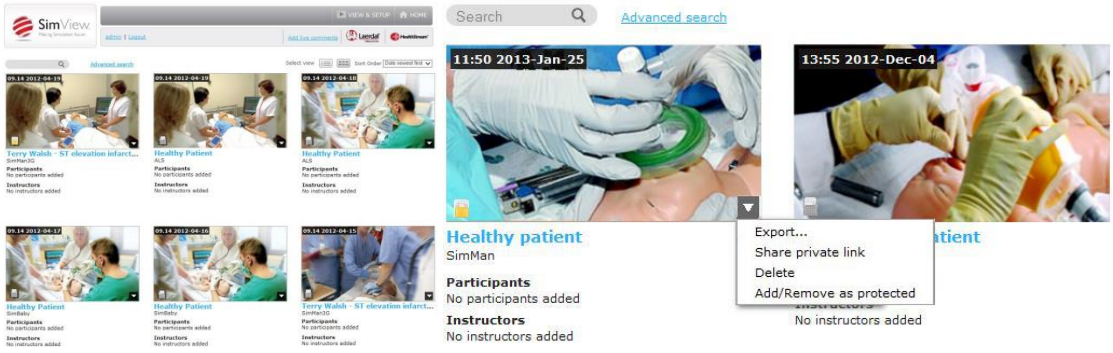


Figure 16 The Home screen and options for simulations

Select the simulation to watch or delete by clicking on the link below the picture.
When you have selected the simulation by clicking on the picture you have 3 options if you click the triangle in the bottom right corner:

- Export the simulation for Stand-alone use with Session Viewer or for backup purposes. See page 37.
- Delete the simulation if it is not relevant anymore and for freeing up space on the hard drive.
- You can make a private link for sharing the simulation with others without exporting it.
  You can then send this link to the person you want to share it with. The person will only be able to see this simulation and nothing else, and will not be able to user other features of SimView
  The person that gets the link must be on or have access to the same network the SimView is located on, but does not need a SimView account to see the simulation. The access via this link will be restricted to only this one simulation.

Note! Only delete simulation files using the SimView "Home" screen or by using the link under Server settings: ***View recovered simulations***.

5.2.4 Video file sizes

The hard disk storage needed for video files depends on the resolution and frame rate.

AXIS camera file sizes

1280x720 25fps 30MB/min	800x450 25fps	15MB/min	480x270 25fps	6,5MB/min
1280x720 20fps 25MB/min	800x450 20fps	12MB/min	480x270 20fps	6MB/mim
1280x720 15fps 20MB/min	800x450 15fps	10MB/min	480x270 15fps	5MB/min

USB camera file sizes:

1280x720 10fps 15MB/min	640x480 30fps	15MB/min	320x240 30fps	5MB/min

Analog camera file size: 15MB/min, there are no size options, but it looks like 640x480.

Note! The sizes are approximate as the motion activity in the picture will change the actual file size; the more motion the bigger file size

5.2.5 Recovering simulations

If for some reason the recording session is interrupted before you get to the debriefing, and hence the file is not saved by the normal routine, you may be able to recover it by using the ***View recovered simulations*** on the ***Settings*** pane on the server. You will have to be logged in as administrator to do this.

5.2.6 IP Camera

To add cameras to the simulation setup, start SimView and login as Administrator.
Note! SimView only supports selected models of AXIS IP cameras.

1. From the Home screen click the ***VIEW & SETUP*** button(1)
2. Click ***Add equipment*** (2)
3. Click the ***Devices*** (3) drop down list.
4. Select ***IP Camera*** by clicking on it in the list (4 and 5).
5. Wait while the list of IP cameras is updated (see Figure 20).
6. Click in the ***Found devices*** (6) to get the drop-down list and select the desired camera (7).
7. Fill in the ***Login*** (8) administrator name and ***Password*** (9)
8. Click the ***Add equipment*** (10).
9. You can now select the resolution on the video quality by clicking the ***Resolution*** (11) drop-down list and selecting the resolution you want.
10. You can also change the number of picture per second (fps) by clicking the ***Fps*** (12) drop-down list
11. Press ***Save changes*** (13) if this was the last camera to add, otherwise add a new camera by clicking the ***Add equipment*** button (2) again and continue until you have added all the needed cameras.
12. You can deactivate the camera by un-checking the ***Active*** (14) check box, and click ***Save changes***.
13. If you want to remove the camera from the setup click on the ***Remove*** button (15).

Figure 17 Add equipment starting point

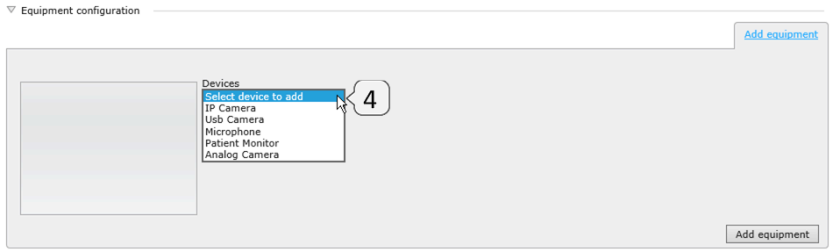


Figure 18 Drop-down list of possible type of equipment

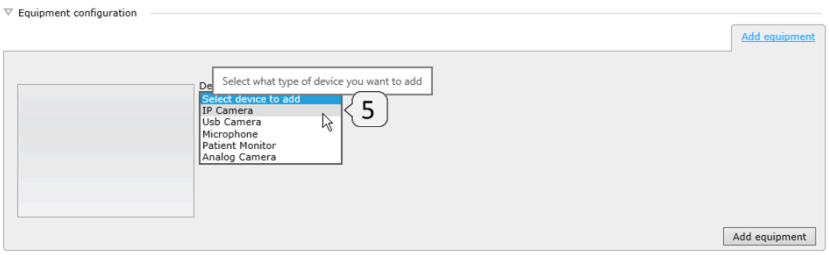


Figure 19 IP Camera selected

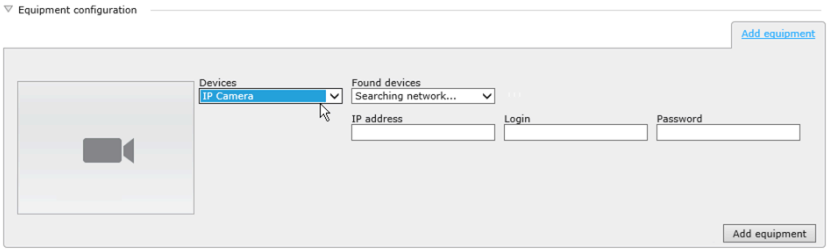


Figure 20 IP camera search on going please wait

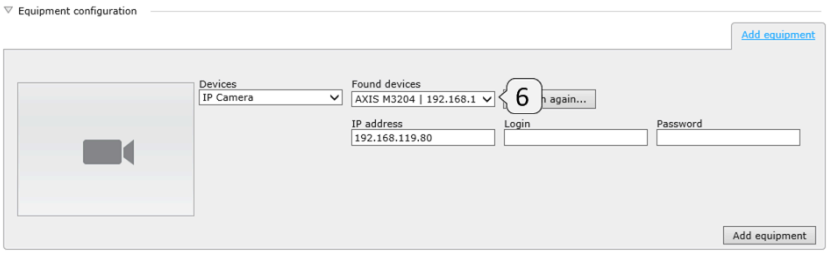


Figure 21 IP camera search finished and drop-down list ready

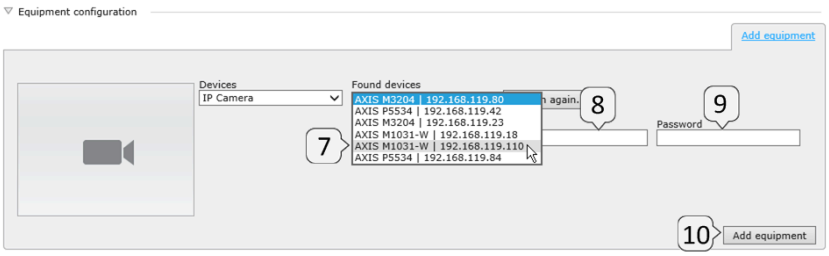


Figure 22 IP camera selection with camera IP addresses shown

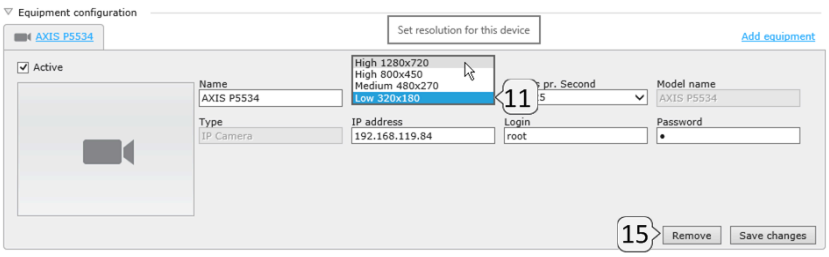


Figure 23 Video resolution selection

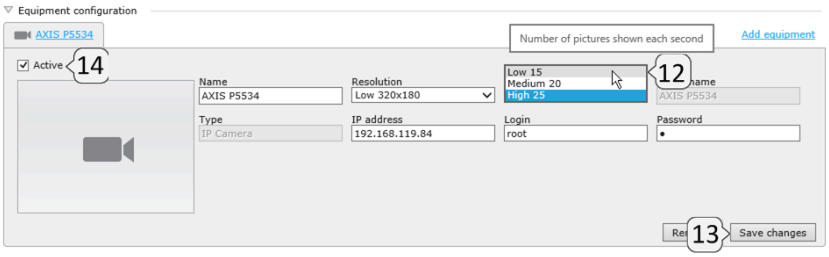


Figure 24 Frames per second selection

5.2.7 USB Cameras

Adding USB cameras is similar to adding IP cameras, just select USB Camera instead.

Figure 25 Add equipment starting point

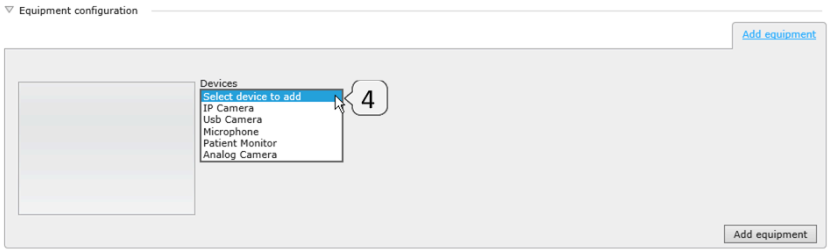


Figure 26

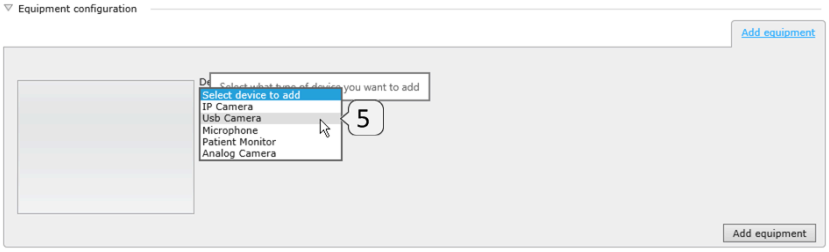


Figure 27

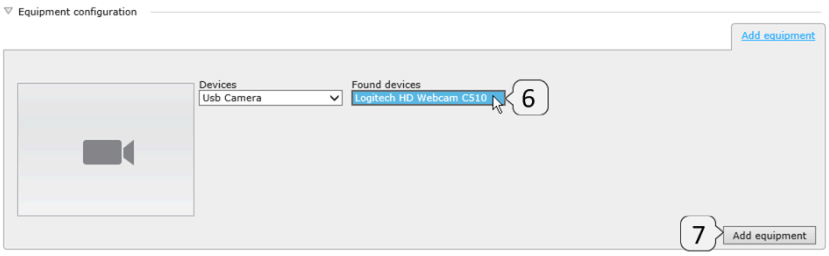


Figure 28

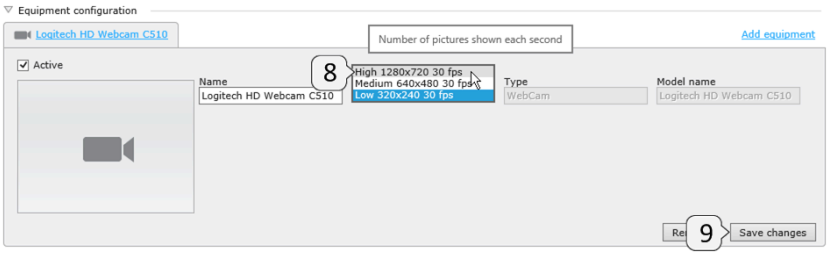


Figure 29

5.2.8 Audio

To add a microphone to the simulation setup, start SimView and login as Administrator.
To add the Windows default microphone or audio input that has been set-up under the recording tab in the "Windows Sound Control Pane":

1. From the Home screen click the ***VIEW & SETUP*** (1)
2. Click the ***Add equipment*** link (2).
3. Select the ***Microphone*** by selecting it from the drop down list (3 and 4)
4. Select the microphone you want to use from the drop down list (5 and 6).
5. Click the ***Add equipment*** (7) button to update and exit.
6. Choose the ***Input mode*** to suit your setup (8).

Figure 30

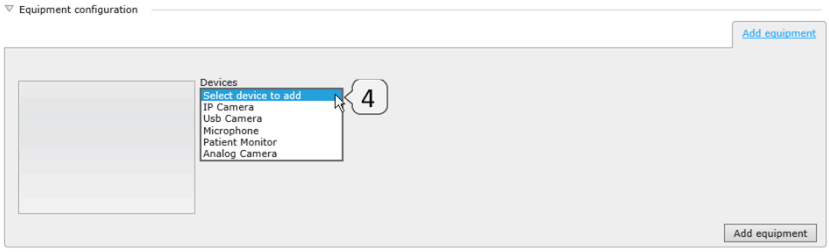


Figure 31

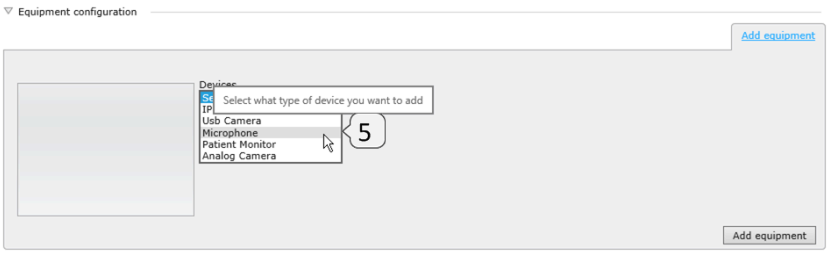


Figure 32

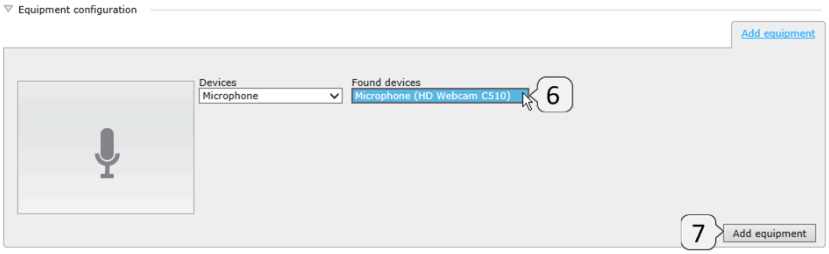


Figure 33

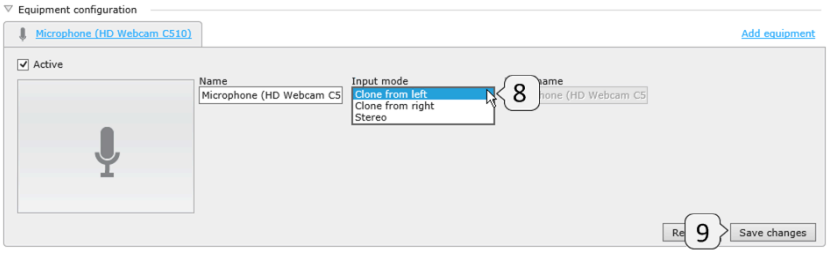


Figure 34

5.2.9 Patient Monitor

To add the Instructor Applications Patient Monitor, start SimView and login as Administrator.

1. From the Home screen click the ***VIEW & SETUP*** (1)
2. Click the ***Add equipment*** (2) button.
3. Click the in the ***Devices*** (3).
4. Select the Patient Monitor by clicking in the list window (4 and 5).
5. Insert the correct IP number in the ***IP address*** (6) field, the other fields are pre-filled and should not be changed.
6. Click the ***Add equipment*** (7).
7. If you want to change the IP address later enter the new address in the field (8)
8. Press ***Save changes*** (9).
9. Later changes in IP address can be done by changing the address in the address field (8) and save changes.

Figure 35

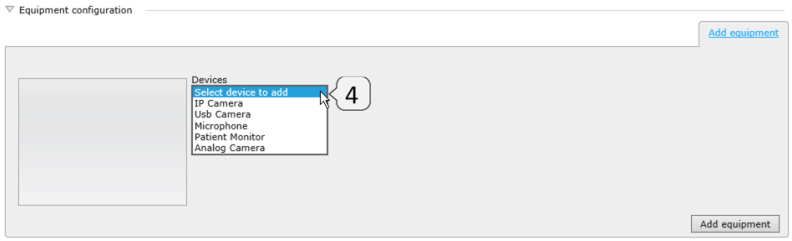


Figure 36

Figure 37

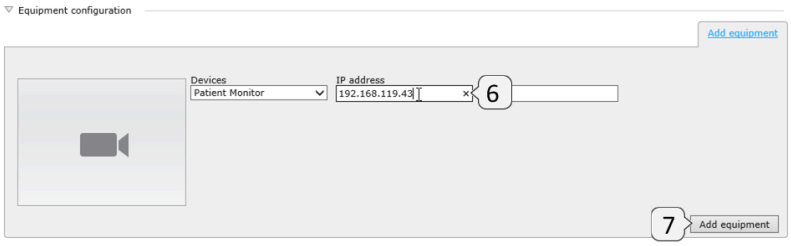


Figure 38

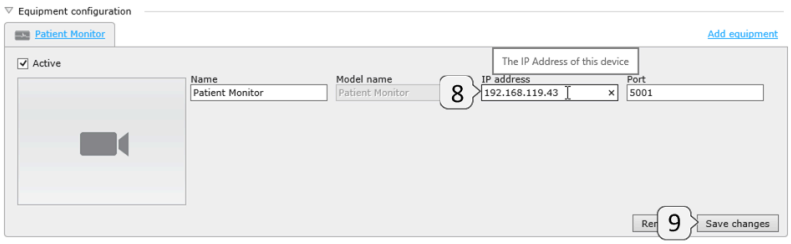


Figure 39

Tip! Remember that the Patient Monitor is regarded as one of the maximum 4 video feeds that can be used during recording. In order to enable Patient Monitor recording you must setup the SimView Extension service and enable it in the Instructor Application, see chapter 4.6 and 4.7 on page 9.

5.2.10 Unified Patient Monitor

When using the unified Patient Monitor you don't need to know the IP address of the monitor, as it will be shown in the search list. The requirement is that the Patient Monitor is setup in the LLEAP application on the PC acting as Patient Monitor.

1. From the Home screen click the ***VIEW & SETUP*** (1)
2. Click the ***Add equipment*** (2) button.
3. Click the in the ***Devices*** (3).
4. Select the Unified Patient Monitor by clicking in the drop down list (4).
5. Select the required Patient Monitor from the list (5 and 6), if not shown, click the ***Search again*** button.
6. Click the ***Add equipment*** (7).

Figure 40

Figure 41

Figure 42

Figure 43

5.2.11 Analog camera

Adding an analog camera follows similar steps as the USB camera, but requires that the PC is equipped with a Laerdal video grabber card. If you have more than one camera, use the drop down list for selection (6).

Figure 44

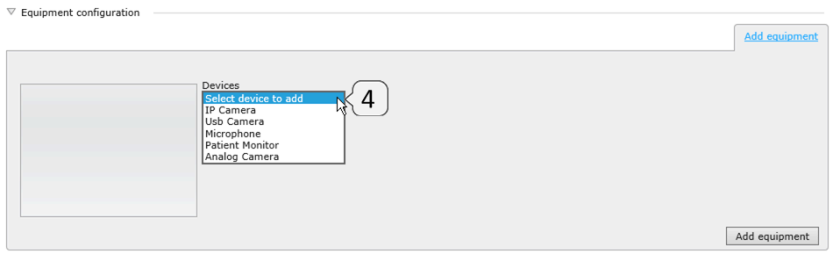


Figure 45

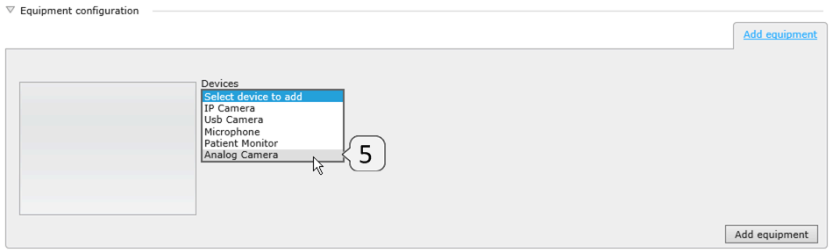


Figure 46

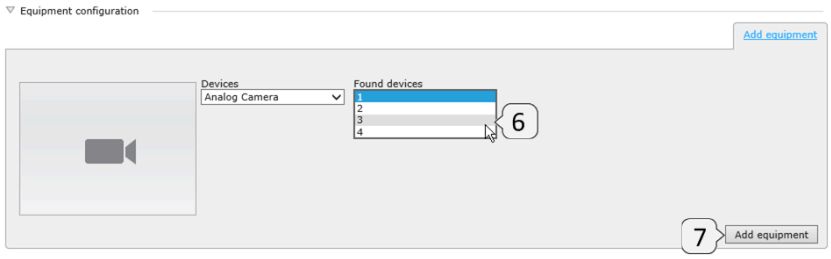


Figure 47

6 Using SimView Server

With SimView you can record simulation sessions and annotate the video included in the event log. You can view the video either as a user, instructor or as an administrator.

Note! Only the administrator and the instructor can make annotations in the event log.

6.1 The login screen

When SimView Server is started the first thing to do is log in, this is done on the login screen.

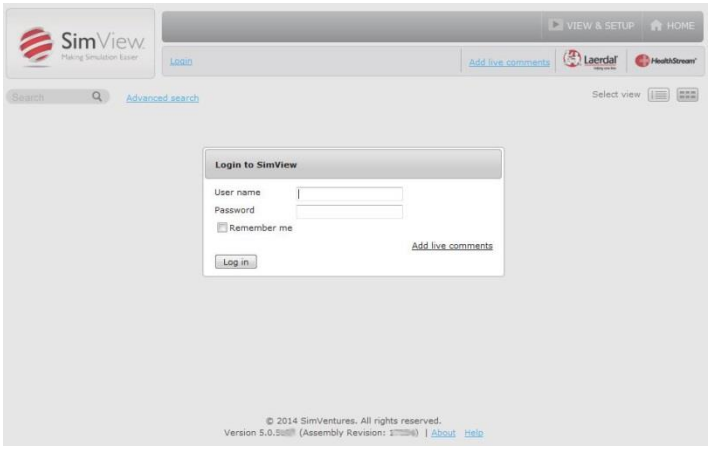


Figure 48

Enter your username and password and click ***Log in***.
You will then see the home screen, from where you can choose your next step.

If you do not have a login, you should contact your SimView administrator.

6.2 The Home screen:

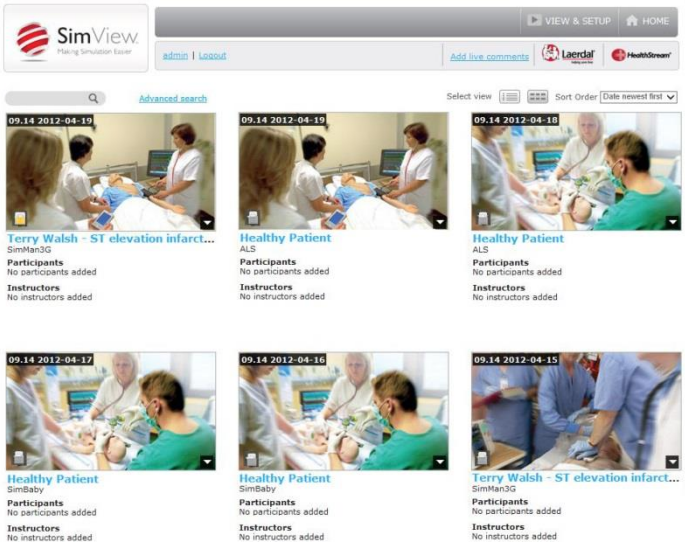


Figure 49 The Home screen

Select the simulation to watch by clicking on the picture or the link below the picture.

If you are an administrator or instructor, you can edit the simulation by adding comments. These can help make the student aware of errors or things done correctly.

Note! The students, or users, cannot edit the simulations.

Tip! The picture shown together with the simulations is a snapshot from the first camera added during initial configuration; i.e. the leftmost enabled camera tab in the ***Equipment configuration***.

Besides being able to view the simulation, you also have up to 4 options depending on the type of user type if you click the triangle in the bottom right corner:

- Delete the simulation, if it is not relevant anymore and for freeing up space on the hard drive.
- Export the simulation.
- Share the simulation.
- Protect the simulation. Can also be done by clicking the lock icon in the left corner.

For more information on the last two topics see chapter 6.11 Sharing simulation recordings.

6.3 The View & Setup window

The options available on the View & Setup screen depend on the user's role: administrator, instructor or user.
The View & Setup page also gives administrator the possibility to change the configuration of SimView.
The View & Setup page shows the images captured from the active camera, you will see images from all active cameras if you have more than one active camera.

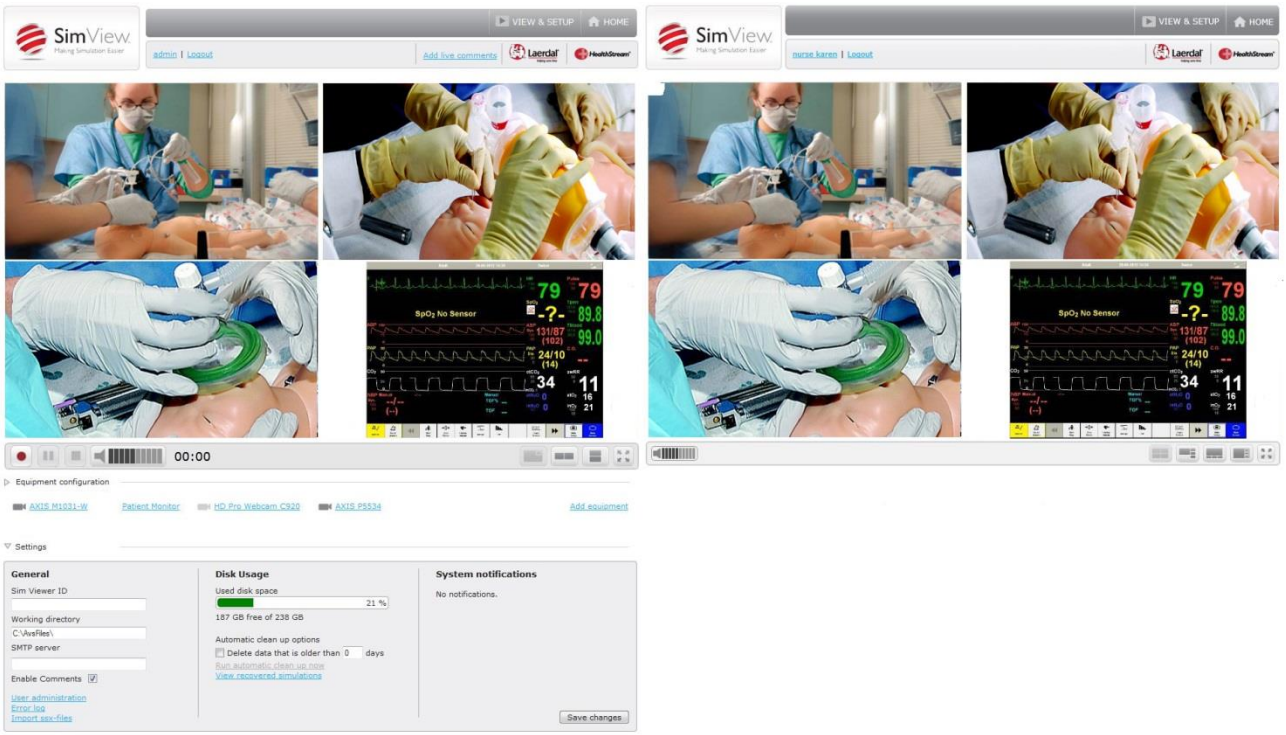


Figure 50 The two type of View & Setup screens

If you are an administrator you will have the possibilities shown to the left otherwise the window at the right is for the other user types.

6.4 Video layouts

Figure 51 The View window with one active camera

Figure 53 Three window layout

Figure 52 Picture in picture

Figure 54 Three active cameras and a patient monitor window setup

When you have more than one camera active you can change the layout of the video windows and choose which camera to be show in the main video window by using the buttons in bottom control strip of the video window.

Figure 55 The window layout control

Figure 56 Alternative four window setup

The window top bar gives control over PTZ position, 4:3 or 16:9 format control and expansion of video window. The bar shows up when the mouse cursor is placed inside the window.

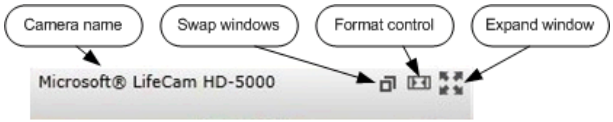


Figure 57 Controls on the small video window

Open AXIS camera window
Pre defined PTZ possitions if supported by the camera
Collapse window
AXIS P5534 - Operator Mode
★meeting ★Test lo.. ★Pos 2 ★Home

Figure 58 Controls on the expanded window

The swap window button will swap the window in the main video window; with the contents of the small video window the expand window button will expand the window to fill the entire video frame, to only showing this one video stream.

Note! The functions on the control bar depend on the user type that is logged in, only when logged in as the SimView administrator or instructor the PTZ controls and the ***Operator Mode*** are available.

Tip! The web browser must have its pop-up blocker disabled in order to use the ***Operator Mode*** for the AXIS cameras.

Note! The layout is optimized for widescreen displays in 16:9 format, things may look different and less optimized when seen on a 4:3 format screen.

6.5 Recording using legacy instructor applications

The scenario recording is started and stopped from one of the Instructor Application like SimMan or SimMan3G etc. The cameras connected to the server will provide video footage to cover the scenario together with the input from the Patient Monitor and the Instructor Application.
The maximum recording length in SimView is 4 hours, but the Instructor Applications may have other restrictions on the maximum recording length, the shortest will apply.
Note! See chapter 6.8 for recording using legacy instructor applications.
Note! The Patient Monitor is counted as a video feed, and is included in the maximum of 4 video feeds that can be used for recording.

6.6 Recording using LLEAP

Using SimView together with LLEAP requires no special setup on the instructor PC's.
Note! SimView must be version 5.0.x or newer.

First make sure that the server is up and running, then start LLEAP on the instructor PC.

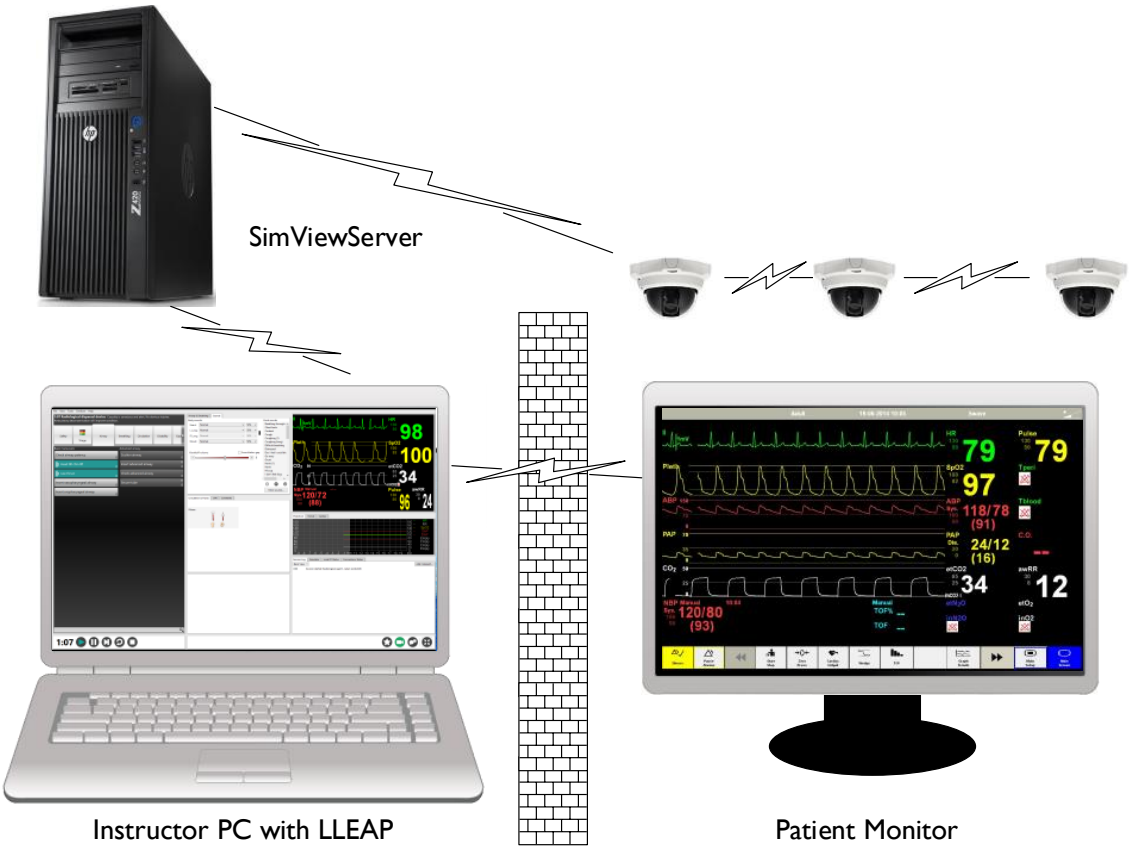


Figure 59 The SimView Server setup with LLEAP instructor PC and PM

In LLEAP start the "LLEAP Instructor Application", select the SimView Server you will use as the "Debriefing System" and proceed with the session. See more in chapter 4.5 LLEAP integration.

When the session is stopped you can select to go to debriefing. You will now have to log in to the server in the browser window that starts on the instructor PC. After login you get the debriefing window, see more about debriefing in chapter 6.10.

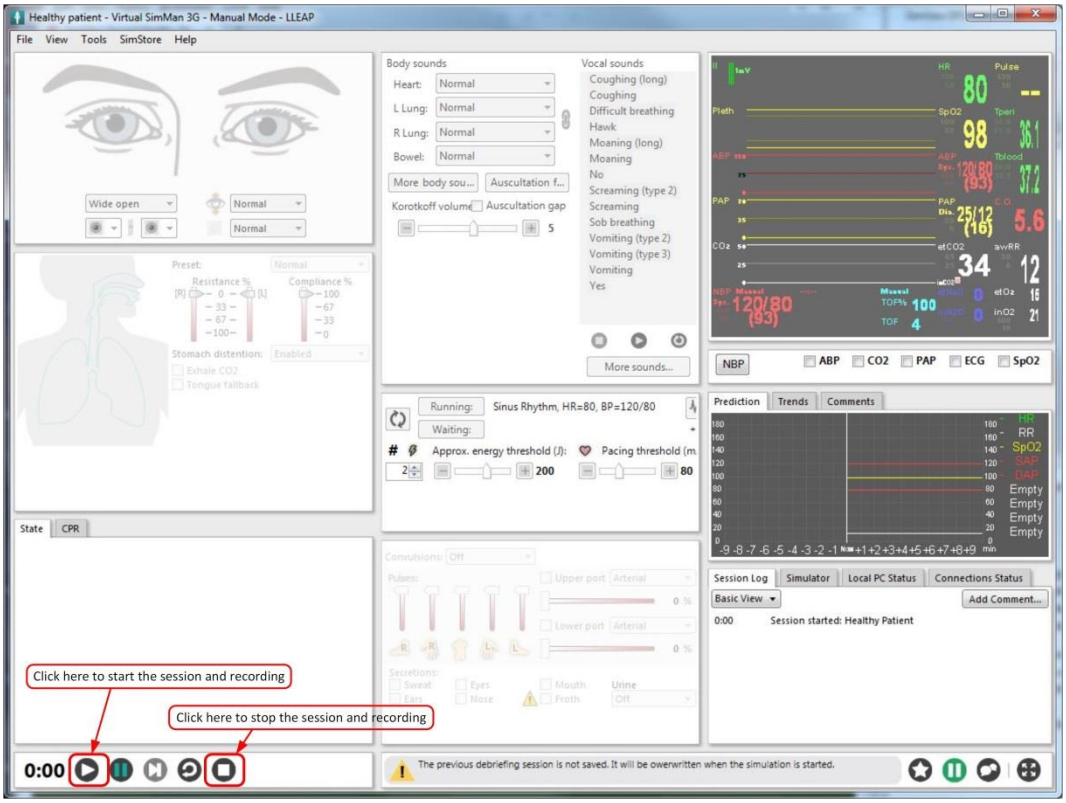

Healthy patient - Virtual SimMan 3G - Manual Mode - LLEAP
File View Tools SimStore Help
Click here to start the session and recording
Click here to stop the session and recording
0:00

Figure 60 How to start and stop recording

Use the ***start*** and ***stop*** buttons to control the recording.

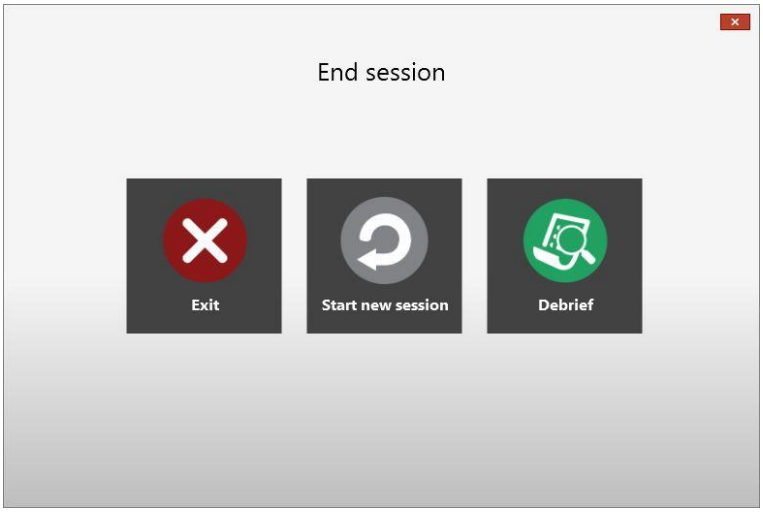


Figure 61 The End session options

When stopping the recording and session select the ***Debrief*** button to see the result.

When the simulation has ended and you go to debriefing, you get the login screen for the SimView server used for the session.

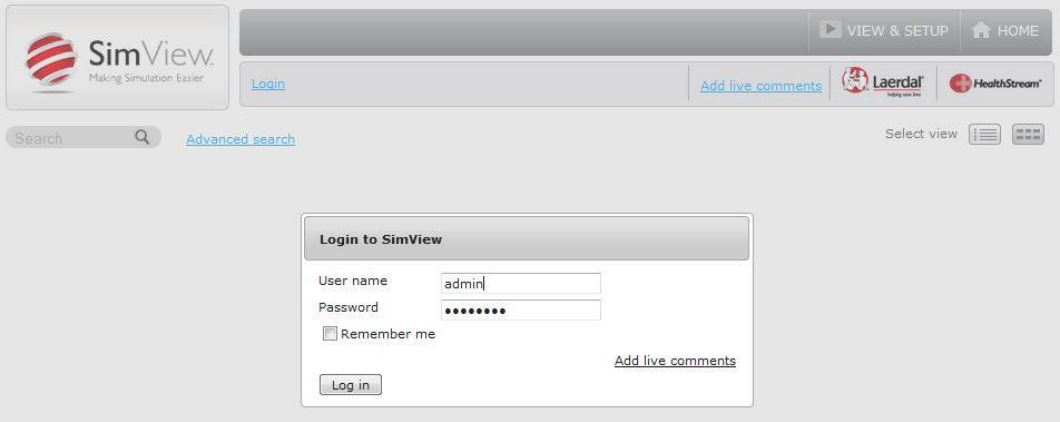


Figure 62

Note! If you already are logged in because of previous activity, you may not have to log in again.

6.7 Inserting comments during a simulation session

You can enable the function "comments on the fly" by opening the server settings and adding a check mark in the checkbox for ***Enable Comments***.

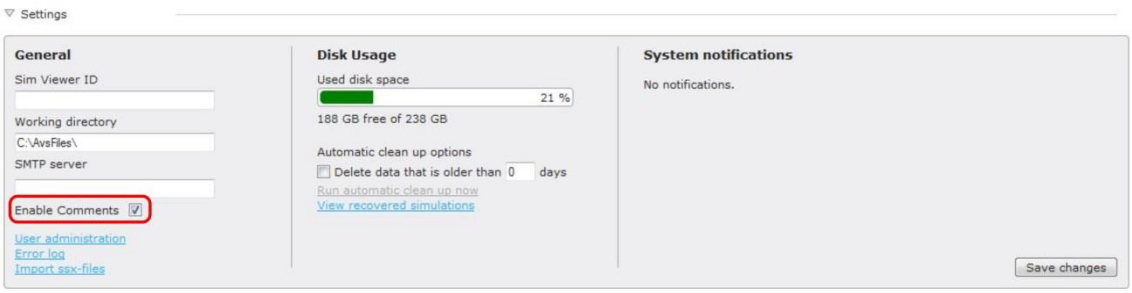


Figure 63 The server settings.

When the ***Enable Comments*** has been enabled you get a new link in the top banner ***Add live comments.***

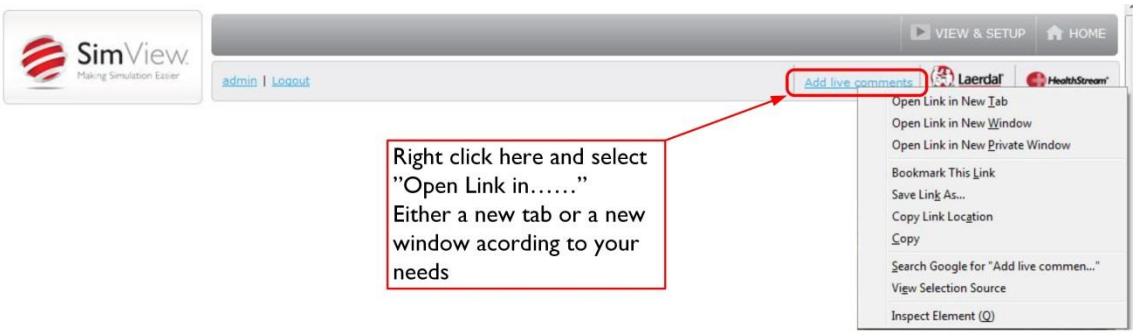


Figure 64 How to open a comment window.

Note! If you just click on the ***Add live comments*** the window will open in the same window as you used for controlling the server.

You add comments to simulations by using a web browser from anywhere using a link looking like this: `<SimViewServerName>`/Comment, where `<SimViewServerName>` is the servers IP address or computer name.
This will open a window for comments entry, it will works on any platform with an updated web browser.

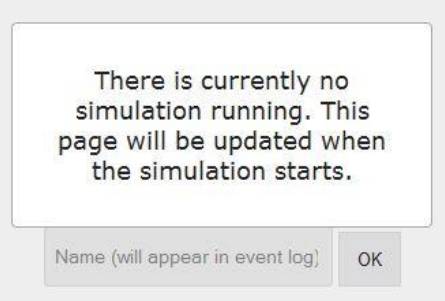

There is currently no simulation running. This page will be updated when the simulation starts.
Name (will appear in event log)
OK

Figure 65 No simulation

Figure 66 Simulation started

This is how the browser window looks before and after a simulation session has been started. Below is the comments window when a session is started.

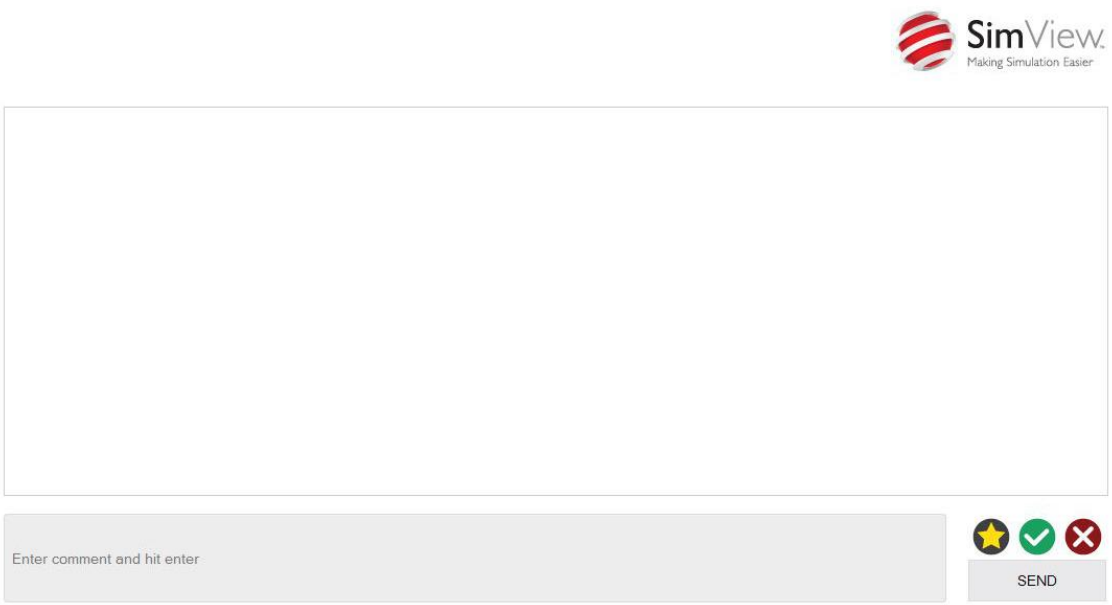


Figure 67 The comment window.

You can type the comments in the gray field and just hit enter for a comment, if you want to make the comment either positive or negative click on the green or red button before click on the send button, or you hit the return button.

The star will just make a "BOOKMARK" entry in the event log with your name, just for remembering things that may take too long time to write on the fly.

The green button will add the correct sign to your comment.

The red button will add an incorrect sign to your comment.

The send button or an "Enter key" press will post your comment to the event log.

You can use the red and green button before or after you enter your text in the comment field, if used before the comment will get the icon added when you hit enter. The star key is used without text.

Figure 68 Showing the activated green OK button.

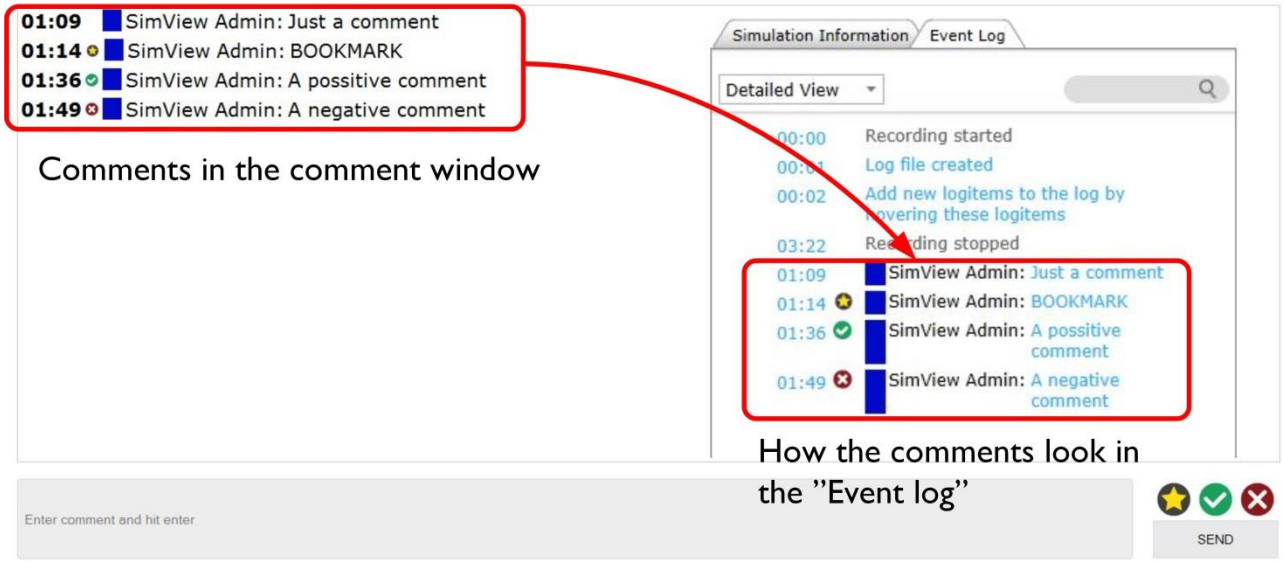

01:09 SimView Admin: Just a comment
01:14 SimView Admin: BOOKMARK
01:36 SimView Admin: A possitive comment
01:49 SimView Admin: A negative comment
Comments in the comment window
Simulation Information
Event Log
Detailed View
00:00 Recording started
00:02 Add new logitems to the log by covering these logitems
03:22 Recording stopped
01:09 SimView Admin: Just a comment
01:14 SimView Admin: BOOKMARK
01:36 SimView Admin: A possitive comment
01:49 SimView Admin: A negative comment
How the comments look in the "Event log"
Enter comment and hit enter
SEND

Figure 69 Comments as shown in the two different instances.

6.8 Controlling SimView from the legacy Instructor Application

When using the SimView Server together with the Instructor Applications like SimMan3G, there are a few things to observe in order for everything to work as expected. Apart from the setup described in the administrator manual, there are things to observe when starting and stopping the recording sessions.

Always start sessions from the file menu ***Start new session…*** then press the ***Start session*** (see green marking). When stopping the recording session use the ***End session***.

In the pop-up window you have 3 choices ***Quit***, ***Start new session*** or ***Debrief***, never use the ***Save session*** as it does not work with SimView Server. To save a simulation session go to Debrief and save it on the SimView page that show up in your web browser.

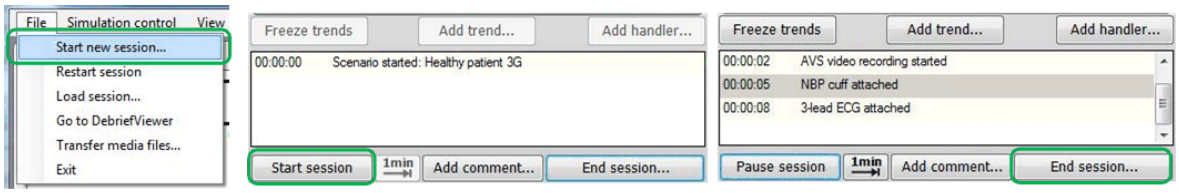


Figure 70

Tip! Only use the options marked with green boxes.

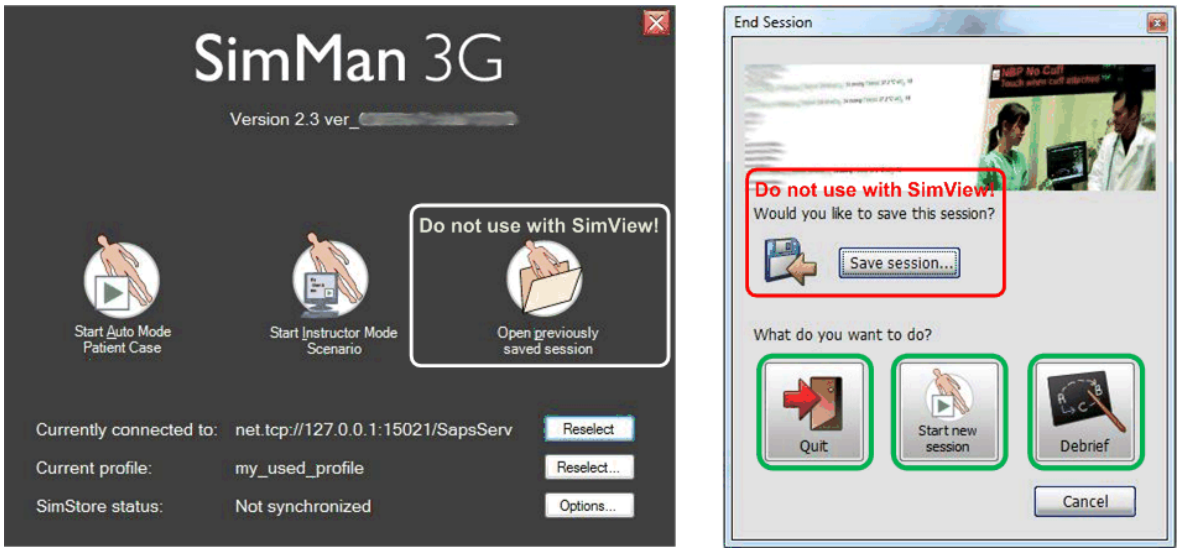


Figure 71

6.9 Operating the IP cameras

The PTZ (Pan Tilt and Zoom) cameras can be operated from the View & Setup page during watching and recording. Moving the cursor into the picture frame will add the control buttons as well as the top banner with presets and Operator Mode.

Note! The PTZ camera controls in SimView only operate with the supported AXIS cameras and do not work with analog cameras.

Note! The built in controls in SimView are mainly to be used for adjusting the position of the cameras, not for real time control during a session.

You can set new preset position by clicking the star button once you have positioned the camera where you want it, you will be asked to enter a name for the position. You can have up to 5 different presets; they will be shown at the top banner in the video window when you have the cursor placed inside the window. The Operator button is for opening the AXIS control in a new browser window.

Note! You will only have the control buttons if you are logged in as the administrator or instructor.

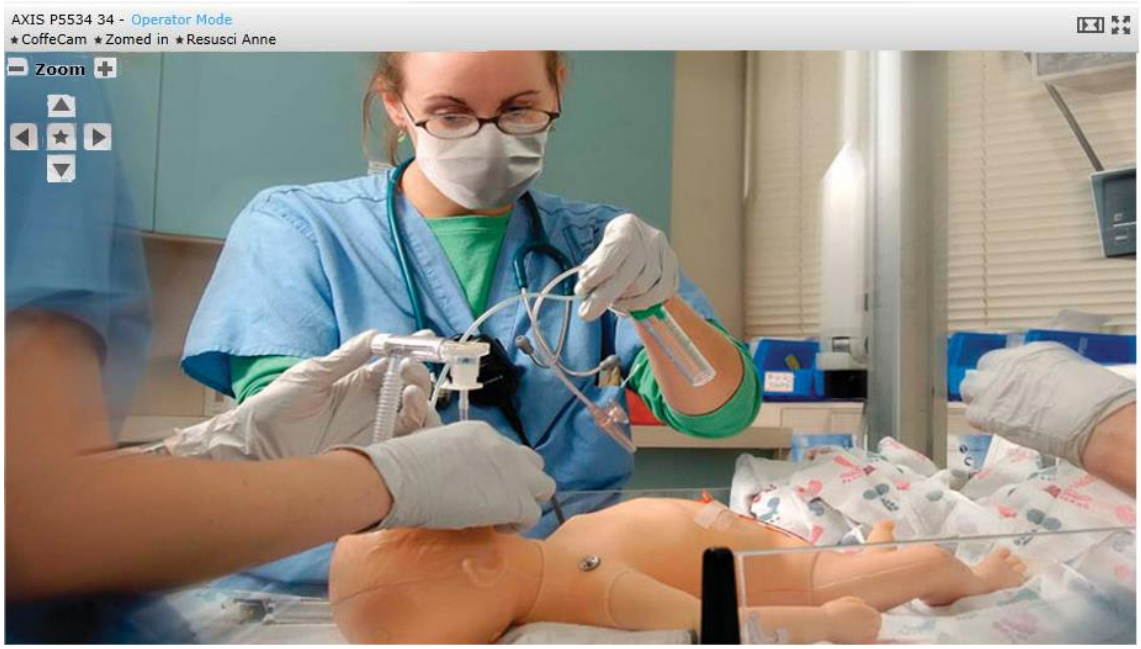


Figure 72 Camera control buttons for PTZ cameras.

6.9.1 Operator Mode

The Operator Mode is used for real time control of the PTZ. Use this option if you need to control video in real time during a session.

6.10 Debriefing

When you stop the simulation in the Instructor Application you must go to debrief to save the recorded session. When debrief is opened you must log in to the SimView server in the browser window that opens on your Instructor PC. You will only have to this once for each day or as long as you are logged in to the Instructor PC. The window you will see after the login is the debrief window:

Figure 73 The debrief window

Note! Only Administrators and Instructors can save sessions. Users can only print the ***Event log***.

In order to be able to see the recorded session later it is important to save the simulation using the ***Save*** button. You can add the name of the session instructor and the students name(s) to the ***Simulation Information*** tab before saving.

In the debrief window you can see the simulation, if you are administrator or instructor you can also annotate the simulation. A student user you can just watch the recorded session.

If you do any additions or changes to the simulation after the first save you must save again.

6.10.1 Printing the event log

If you would like to have the ***Event log*** on paper you can use the ***Print*** button.

Figure 74 The Administrator view with save, print and delete buttons

Figure 75 The Instructor view with save and print buttons

The Instructor is allowed both to save and print the simulations.

Figure 76 The User view with only the print button

If you are not an Administrator or Instructor on SimView the "Save" and Delete buttons is removed. Only a "Print" button is shown as you are not allowed to edit and save simulations.

The print button opens a window with the "Event log" for print, click the printer icon for printing.

Mozilla Firefox
simview3/SimView/Simulation/Details/697f6fcd-7452-413a-a19f-c00f4ac3389d
SimCenter
Making Simulation Easier
Simulation date and time : 22-08-2014 08:06:30
Simulation name : Med Complex 2 Jennifer Hoffman
Simulator type : SimMan3GMystic
Scenario name : Med Complex 2 Jennifer Hoffman
Server name : SimView Server
Event Log
00:00 Session started: Med Complex 2 Jennifer Hoffman
27:58 Going to debrief

Figure 77 The print file, showing the "Event log".

6.11 Sharing simulation recordings

There is more than one way to share the simulation recordings with the participants.
If the participant has an account on the SimView Server, then the person can just log-in on the SimView server from any PC on the network, using an internet browser i.e. Internet Explorer or similar.
If the participant does not have an account on the SimView Server, then you have two ways of sharing the simulation, either export the file to a thump drive or send a link to the simulation.

- You can make a private link for sharing the simulation with others without exporting it.
  You can then send this link to the person you want to share it with. The person will only be able to see this simulation and nothing else, and will not be able to use other features of SimView
  The person who gets the link must have access to the SimView server via the local network, but does not need a SimView account to see the simulation. The access via this link will be restricted to only this one simulation.
- Export:
  - You can save the full session containing all the data for stand-a-lone use with Session Viewer or for backup purposes.
  - You can also select to just export a video file with audio which can be played in a Media Player.
- Delete the simulation if it is not relevant anymore and for freeing up space on the hard drive.

Figure 78 Export or share a private link to a simulation

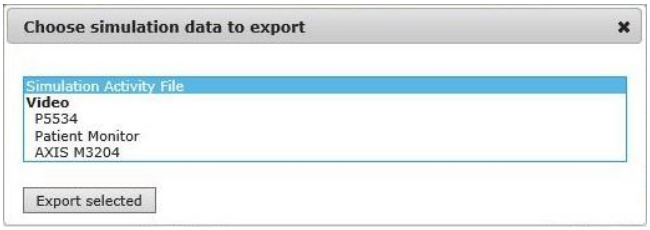


Figure 79 Export options

The "Simulation Activity File" is an *.ssx file for use with Session Viewer. It includes the whole scenario with vital signs, event log and video from all cameras and the patient monitor used during the session. It looks as seen on the SimView Server.
The video file is a *.mov file for use with a media player application. (i.e. Microsoft Media Player or QuickTime). It is the video file from the selected camera or patient monitor including audio if a microphone has been enabled; there are no vital signs or event log included if exported this way.

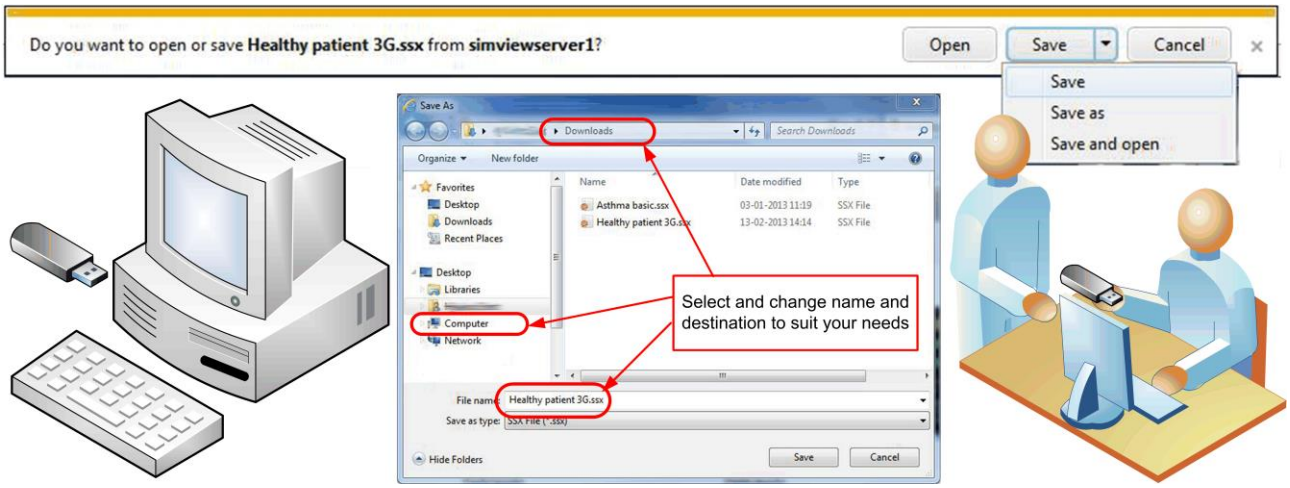


Figure 80 Transferring a SimView recording to another person by using the export function.

6.11.1 Exporting a simulation

When exporting the simulation you have two options, the whole simulation or just one of the video files. When exporting the whole simulation, it will in Session Viewer look exactly as in SimView with all video and event log etc.
Choosing to export a video file will only show the video from the chosen video feed.

When exporting, you have the option to save the file on a USB memory stick (thumb drive) for use on other PCs, even stand-alone PCs with no network connection.. You can also save the file on a network attached hard drive for use on the local network. The playback PC needs to have Session Viewer installed in order to show the whole simulation recording, or a media player to playback the standalone video.

6.11.2 Sharing simulation links

Sharing simulation by private links can be done by e-mail.
To use the e-mail option, you will have either have a Live Mail account or have a mail client with a valid e-mail account installed on the SimView Server, or the PC from where you are doing the export.

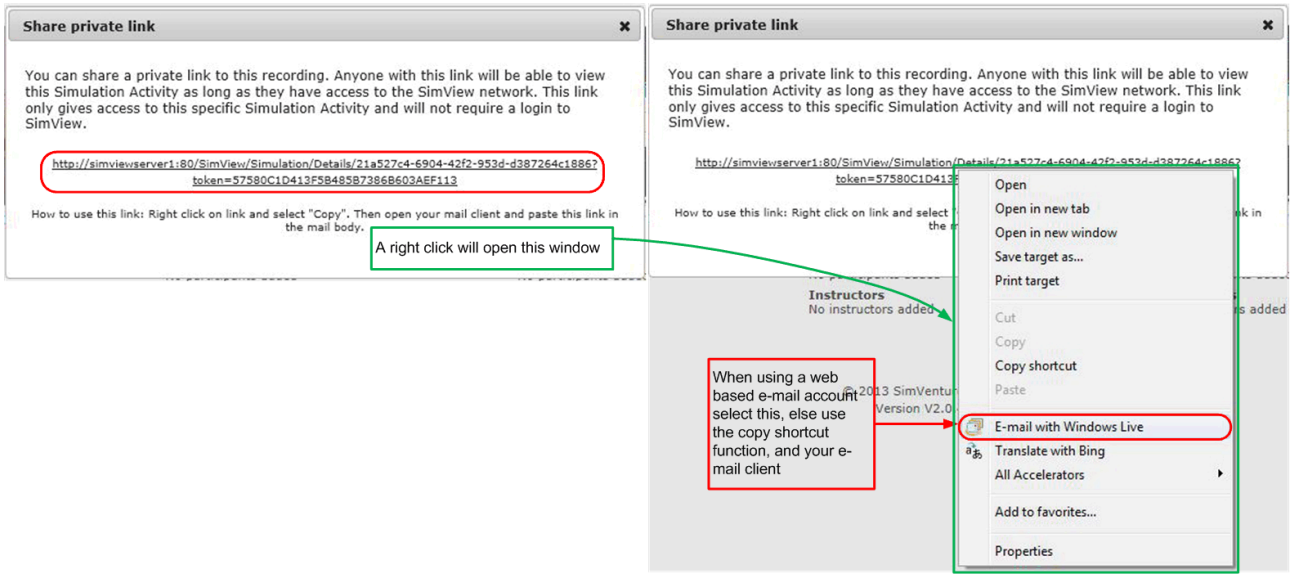

Share private link
You can share a private link to this recording. Anyone with this link will be able to view this Simulation Activity as long as they have access to the SimView network. This link only gives access to this specific Simulation Activity and will not require a login to SimView.
http://simviewserver1:80/SimView/Simulation/Details/21a527c4-6904-42f2-953d-d387264c1886?token=57580C1D413F5B485B7386B603AEF113
How to use this link: Right click on link and select "Copy". Then open your mail client and paste this link in the mail body.
A right click will open this window
Share private link
You can share a private link to this recording. Anyone with this link will be able to view this Simulation Activity as long as they have access to the SimView network. This link only gives access to this specific Simulation Activity and will not require a login to SimView.
Open
Open in new tab
Open in new window
Save target as...
Print target
Cut
Copy
Copy shortcut
Paste
E-mail with Windows Live
Translate with Bing
All Accelerators
Add to favorites...
Properties
Instructors
No instructors added
When using a web based e-mail account select this, else use the copy shortcut function, and your e-mail client

Figure 81 Sharing a link to a simulation.

Note! The playback PC must be on the same network or have access to the SimView server with that file.

6.11.3 Importing .ssx files

You can import .ssx files made with other application into the database on the SimView Server.

1. From the Home screen click the ***VIEW & SETUP*** (1)
2. Click the ***Settings*** triangle to open the settings pane.
3. Click the in the ***Import ssx-files*** link (2).
4. Click the ***Browse*** button, or drag and drop the file into the field.
5. Select the file in the ***File Upload*** window and click ***Open***
6. A progress bar will be shown during import.

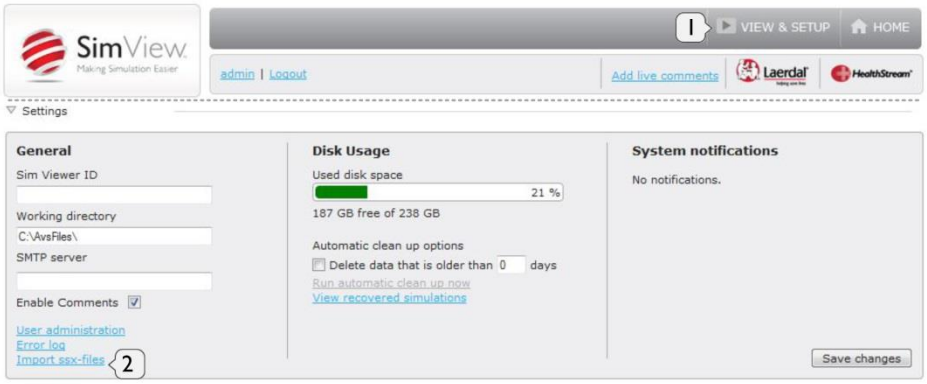


Figure 82

Import ssx-files
Browse and import ssx-files or drag and drop files.
You can import multiple ssx-files at once by holding down Ctrl (Windows, Linux) or Command (Mac) when selecting files to import.
Following a successful import, your simulation recordings can be found using the standard home page search functionality.
Choose ssx-file(s)
Browse...
No files selected.
3
or drag and drop files here

Figure 83

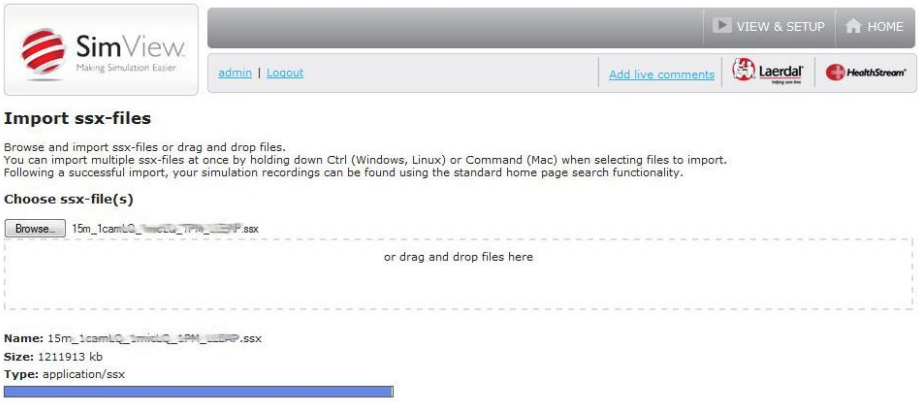

SimView
Making Simulation Easier
VIEW & SETUP
HOME
admin | Logout
Add live comments
Laerdal
HealthStream
Import ssx-files
Browse and import ssx-files or drag and drop files.
You can import multiple ssx-files at once by holding down Ctrl (Windows, Linux) or Command (Mac) when selecting files to import.
Following a successful import, your simulation recordings can be found using the standard home page search functionality.
Choose ssx-file(s)
Browse...
15m_1camLQ_
.ssx
or drag and drop files here
Name: 15m_1camLQ_
.ssx
Size: 1211913 kb
Type: application/ssx

Figure 84

6.12 Functions during debriefing

The following chapters will show the different functions during debriefing.

6.12.1 The timeline

The timeline in the bottom of the Viewer Window can be used to search forward and backward in the session. The timeline size can be controlled by clicking the double arrow that shows up in the right top corner of the frame when the cursor is inside the timeline. Clicking inside the timeline will move the video forward or backward, depending on clicking in front or behind the actual play time.
Holding the cursor over the vital signs will activate a pop-up with the values of the vital signs at that time.

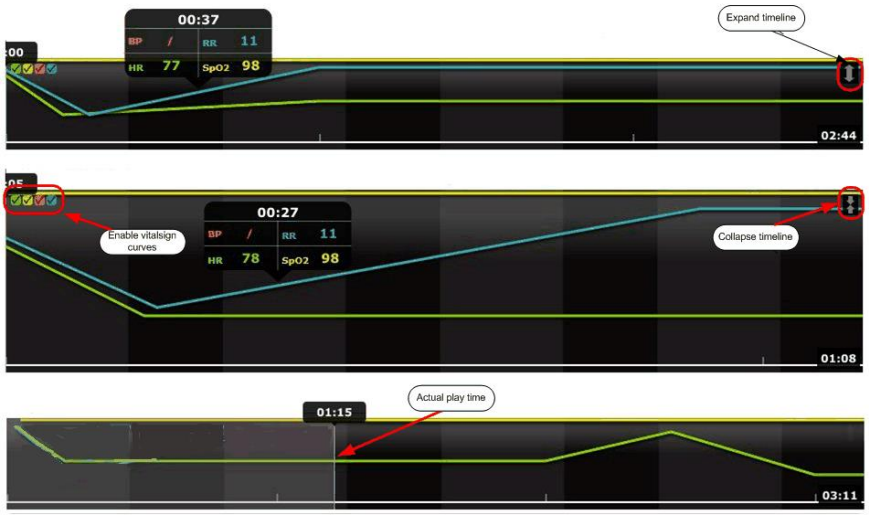


Figure 85 The different timeline views

6.12.2 Basic and Detailed Views

The simulation log can be showed with two different levels of detail in the Event Log.
As seen on Figure 86 there are a lot more information in the detailed view, so if you want to just get an overview of the session; use the basic view.

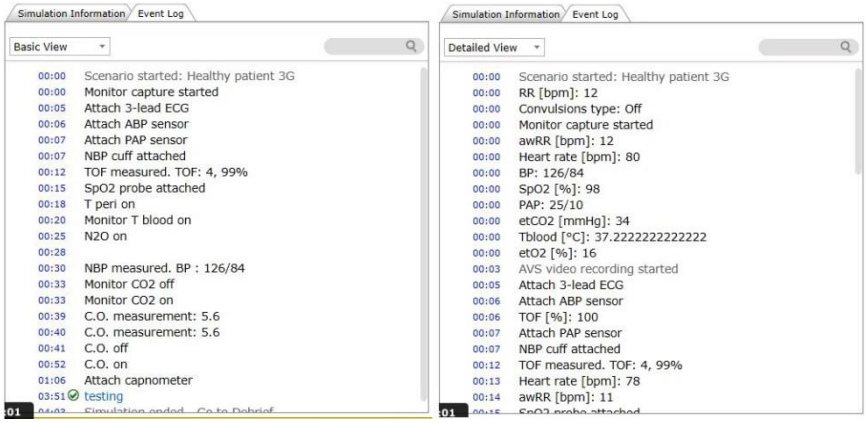


Figure 86 The difference between Basic View and Detailed View

You can change between the views by using the pull-down menu in the Event Log view and then select ***Basic View, Detailed View*** or ***Original View***
Note! You cannot edit the event log in the ***Original View***. The ***Original view*** is the raw data from the simulation session

6.12.3 Adding comments to the Event Log

If you let the cursor hover over the event list a plus sign occurs, and clicking it gives the opportunity to add comments.

In the window that pops up you may now choose which type of comment you want to insert, all the possibilities are show on the picture here:

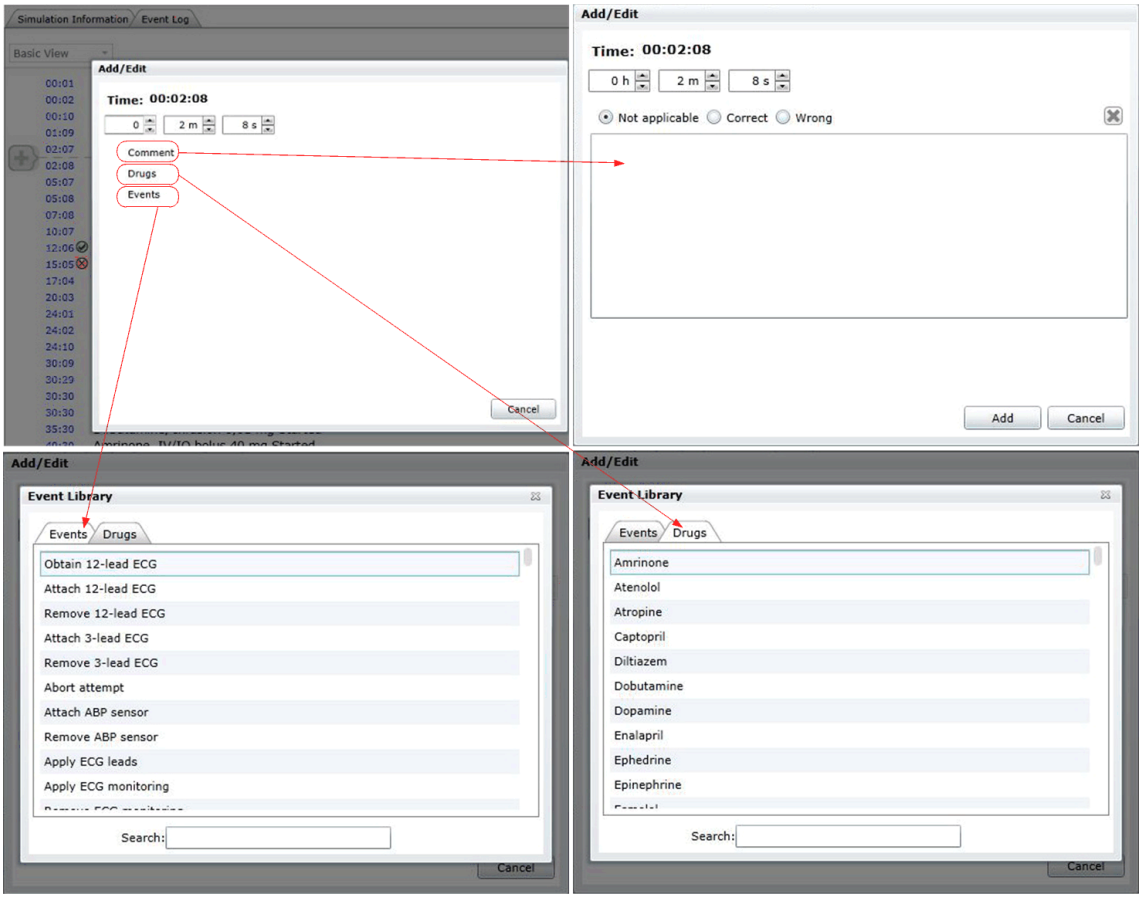


Figure 87 The different comment windows.

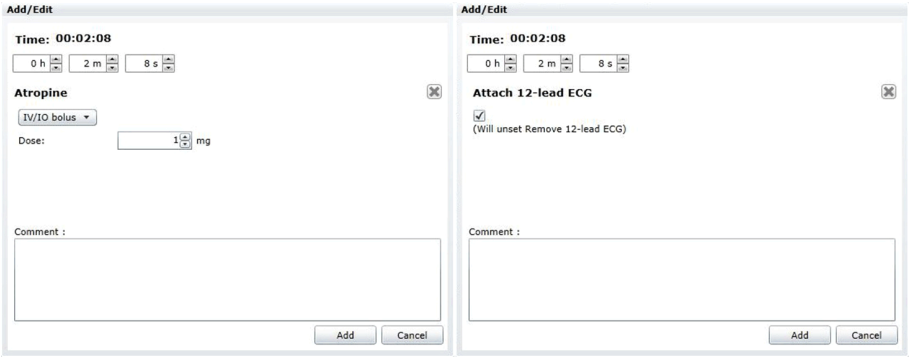


Figure 88 Adding a drug or an event.

When you have added the comment for the student, you can export the session for use with the Session Viewer, and at the same time free the local hard disk space for new simulations by deleting the file. You can now only see the simulation with Session Viewer as it will not be visible in the SimView home screen. The exported files can be put anywhere incl. on a USB thumb drive.

7 Maintenance

7.1 Backup strategy

Video files take up large amount of hard disk storage, so a strategy for how to save the simulations for later use is needed.
The main use of SimView is to record the session and do the annotations for the students, but not to keep all the simulation on the server.
The simulations that need to be saved for later and frequent use must be exported with the export function to a remote storage server or a portable hard disk.
From the remote storage server all the simulations can be viewed with the Session Viewer application from any PC connected to the storage server or using the portable hard disk.
You can export simulations in a format ready for the Session Viewer application for viewing anywhere including offline as the files can be saved on USB memory sticks or portable hard disks.
You can also delete files not needed after being backed up somewhere else.

7.2 What to back-up?

Create a system image backup regularly as this will store all settings and programs for easy repair if the hard disk stops working
In order to repair or move the SimView simulations it is important to make regular backups of the following folders:

- AvsFiles and any extra working directories used for storing video
- App_Data folder in the SimView installation folder, including the file avs.sdf.

The AvsFiles folder is either specified in the Server setting in View & Setup or placed at the default location: `C:\AvsFiles`.

The App_Data folder with the file avs.sdf is located in:
`<System Drive>:\Program Files (x86)\Laerdal\SimView Server\App_Data`.

See also the sub-chapters “Settings - General” and “Server settings - Storage” in the “SimView” chapter.

7.3 Hard disk “clean-up” of simulations

In order to prevent filling the hard disk , there is a cleanup function, that can delete files older than a certain amount of days
An automatic clean-up is run according to the settings in the ***Delete data that is older than*** box, but you can run the clean-up manually at any time, just click at the ***“Run automatic clean up now”***

Note! Any unsaved simulation is automatically deleted after 48 hours.

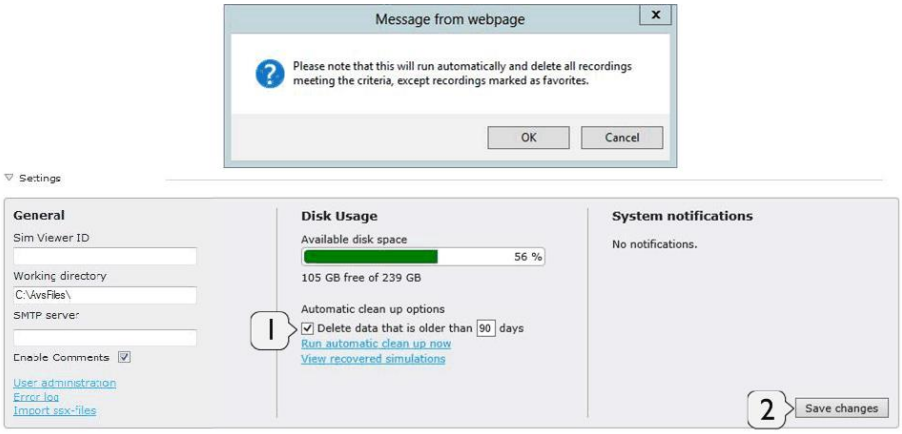


Figure 89

The automatic clean-up for saved simulation is enabled on the server settings by entering the number of days that simulation have to be older than in order to be deleted (1), and then click in the check to enable the feature checkbox and save changes (2), you will get at warning to alert you about the automatic deletion of files. (See Figure 89)

Note! Sessions marked as protected will not be deleted.

7.4 System notification

Figure 90

If you get this message you will have to click it and under server setting you will see what caused the warning.

Note! Only the admin user is able to see the information in the Server settings

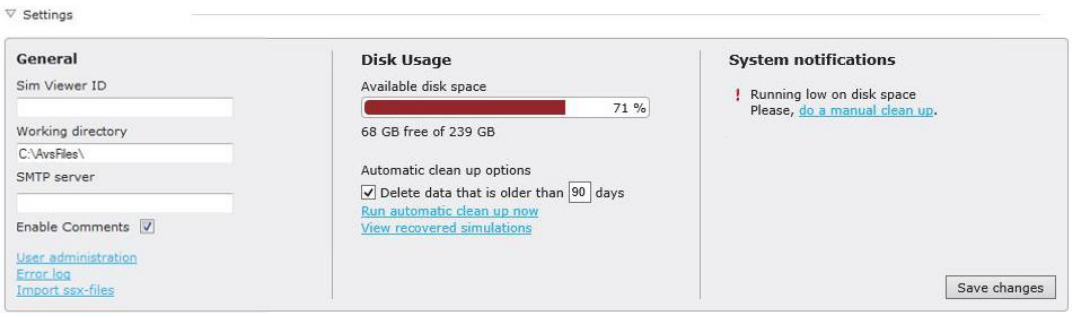


Figure 91

Solve the issue indicated in the System notification area. This can be system driver upgrade, an ***Upgrade notification*** or as shown here a hard disk clean-up.

If the server is connected to the Internet you will get an ***Upgrade notification*** if there is a newer version of the SimView software, the software is not automatically updated, but you can download from www.laerdal.com/download and install it on the server.

7.5 Firewall

If you see this when you try to change the firewall setting:

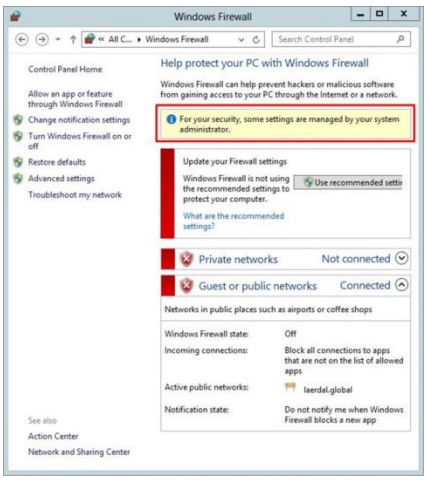

Windows Firewall
Control Panel Home
Allow an app or feature through Windows Firewall
Change notification settings
Turn Windows Firewall on or off
Restore defaults
Advanced settings
Troubleshoot my network
Help protect your PC with Windows Firewall
Windows Firewall can help prevent hackers or malicious software from gaining access to your PC through the Internet or a network.
For your security, some settings are managed by your system administrator.
Update your Firewall settings
Windows Firewall is not using the recommended settings to protect your computer.
What are the recommended settings?
Private networks Not connected
Guest or public networks Connected
Networks in public places such as airports or coffee shops
Windows Firewall state: Off
Incoming connections: Block all connections to apps that are not on the list of allowed apps
Active public networks: laerdal.global
Notification state: Do not notify me when Windows Firewall blocks a new app
See also
Action Center
Network and Sharing Center

Figure 92

You must use the Group Policy Editor to change the settings.
The firewall settings may only be changes as part of Windows group policy, to use this do as follows.
From the desktop place the cursor in the lower left corner to get the start tile to pop up, and then click on the start tile.
Then type mmc and press return, this will start the Group Policy Editor, where you will be able to change the firewall settings. Now on the file menu click Add/Remove Snap-in, click add, find the Group Policy in the available Snap-ins, the click add, and allow the policy to change the computer settings, click Finish and then OK.

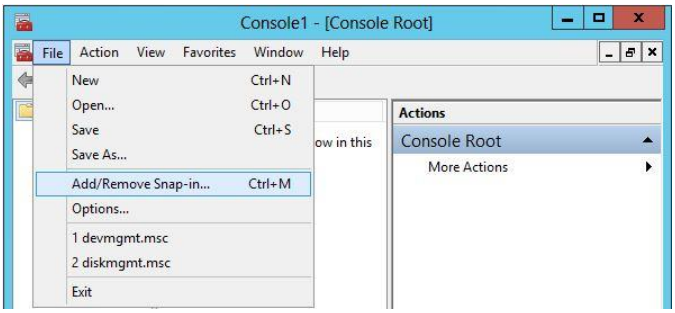


Figure 93

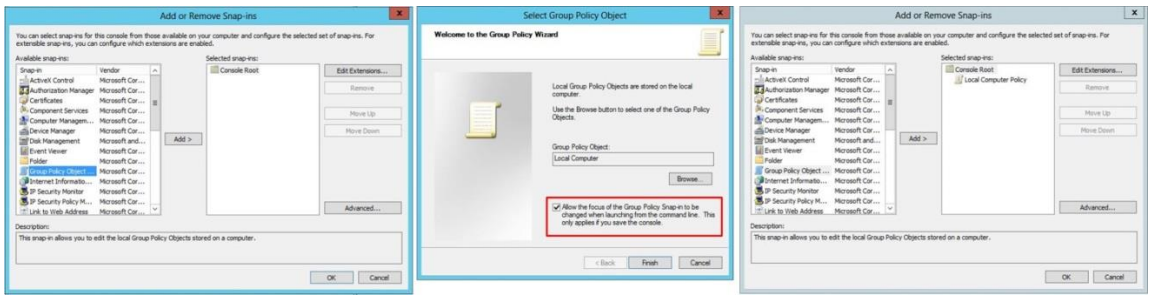


Figure 94

When the Group policy snap-in is installed you can change the firewall settings, by right click on the Windows firewall and select Properties, and then change the settings according to your need.

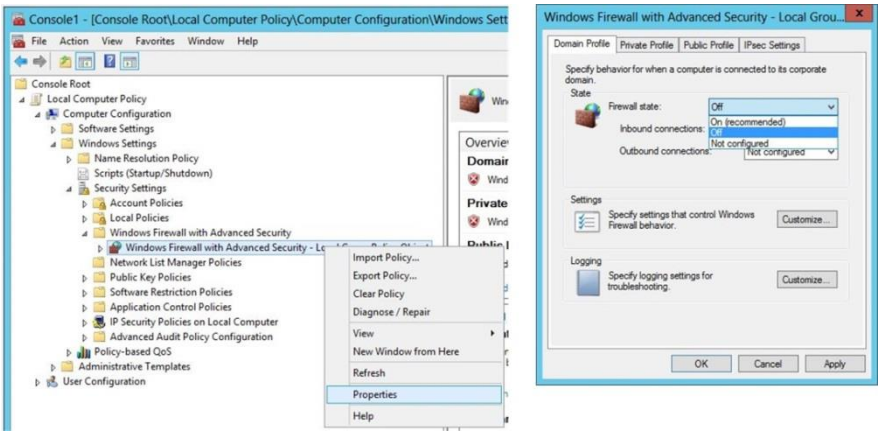


Figure 95

When the firewall is enabled you will have to edit the list of exceptions to suit your needs, webserver, IP-cameras etc.

8 Troubleshooting

Q: My events and timeline don't match / Timeline starts in wrong position
A: Make sure that all your Instructor PCs, Simulators and SimView Server time and date settings are in synch and in same Time Zone.

Q: Why do I get an error when starting recording a session, that the server in busy, unavailable or network problem, but the server is not in use and I can connect to it with my browser?
A: make sure you have the latest version of the SimView Extension, and it is set correctly regarding IP addresses, it will check both the connection and that the service is up running. I severe cases you may have to reboot the Instructor Application PC.

Q: Why can't I record on the SimView server even when the SimView Extension tests OK?
A: Check if the Laerdal SimView Extension Service is started; use the ***Component Service*** to check.

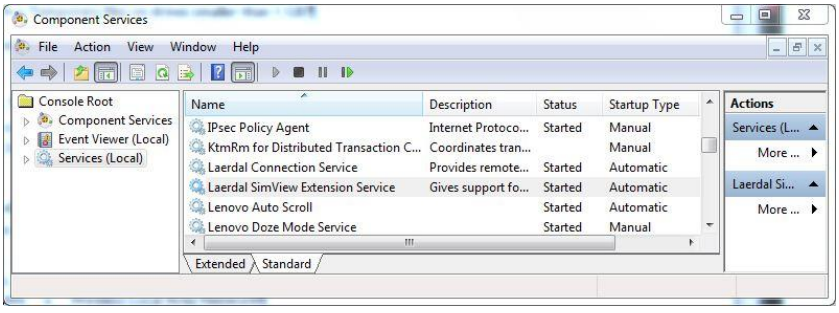


Figure 96

You can find the ***Component Service*** by typing it into the ***Start*** menus search field.

Q: Something went wrong during recording and now I cannot see my simulations?
A: The simulation may not have been save in the debrief session after the recording was stopped. In the

Settings tab you can use the ***Unsaved simulations*** button to see simulations that have not been save by error. You can view the simulation and then save it or if you want delete it.

Q: I can see my simulations on the SimView Server PC, but the video is frozen on my Instructor PC?
A: If the number of video cameras incl. the patient monitor is more than 2 some older laptops cannot play the video. To solve the problem either reduce the number of cameras or upgrade the Instructor laptop PC to the recommended hardware. See the user guide for Session Viewer.

Q: Windows was upgraded by the windows auto-upgrade, now my USB cameras don't work?
A: The USB camera driver has been upgraded and you must remove the camera in SimView and the setup the USB camera in SimView again.

Q: A USB device will not start. It used to work.
A: Please remove it from the device list and add it again. If it still doesn't work, try to move it to a different port.

Q: My USB camera is having issues working properly even after trying to move it to a new port and reconfiguring it.
A: Make sure the newest drivers are installed.

Q: Why is the Instructor app referring to AVS system instead of SimView
A: This was the name of the Laerdal AVS software for which the Instructor Applications were originally created.

Q: I can't start a recording in the SimView browser, even though I have stopped and went to debrief in the Instructor application.
A: In SimView browser click reload or pressF5, then you can start a recording from the SimView browser.

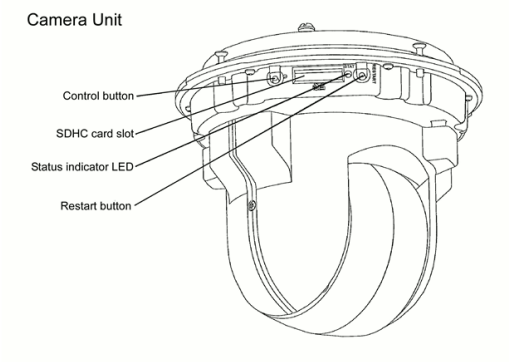
Q: The video feed is pixelated or bad. It usually looks ok.
A: The IP cameras will need to be rebooted once in a while after heavy use or many concurrent users. You can do this by unplugging them from the network cable or by logging on to Operator mode and going to reset camera.

Q: Why is there a 2 second delay in the video and sound when viewing through SimView?
A: The system aggregates the different audio and video sources and then relays them to any client logged on to SimView Server. This makes it easy to view the all the feeds remotely, with as little effort as possible for the end user, but unfortunately the aggregation and relay add a delay.

Q: How much space does my video recording take up on the hard disk?
A: Have a look in chapter 5.2.4 on page 14. There is information here that provides sample file sizes based on the resolution level and length of the recording.

Q: How do I reset the AXIS camera to its factory defaults?
A: To reset the camera to the original factory default settings, use the control button and the restart button on the side of the camera as described on the next pages.
AXIS P5534:
Using the control and restart buttons will reset all the parameters, including the IP address, to the factory default settings:
1. Remove the top cover.
2. Press and hold the control button and the restart button at the same time.
3. Release the restart button but continue to hold down the control button.
4. Continue to hold down the control button until the status indicator color changes to amber (this may take up to 15 seconds).
5. Release the control button.
6. When the status indicator changes to green (which may take up to 1 minute), the process is complete and the camera has been reset. The unit now has the default IP address 192.168.0.90
7. Put the top cover back in its original position.

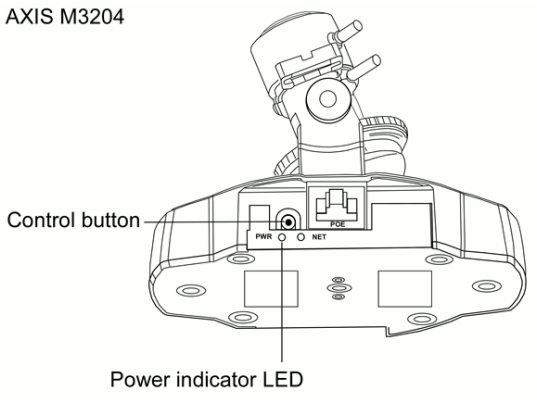
It is also possible to reset parameters to the original factory default settings via the web interface. For more information, please see the online help or the User's Manual available from the AXIS Network Video Product CD supplied with this product.



AXIS M3204:

This will reset all parameters, including the IP address, to the Factory Default settings:
1. Disconnect power from the camera.
2. Press and hold the Control button and reconnect power.
3. Keep the Control button pressed until the Power indicator flashes amber (this may take up to 15 seconds).
4. Release the Control button. When the Power indicator displays green (which can take up to 1 minute) the process is complete and the camera has been reset.
It is also possible to reset parameters to the original factory default settings via the web interface.

For more information, please see the online help or the user's manual.



Q: I can see a lot of simulations on the ***Home*** screen, but I cannot view them?
A: The simulation file may have been moved or deleted without the use of SimView. If the files are moved back, they should play again, if they have been deleted, delete the entries on the "Home" screen, they have been lost.

Q: I sometimes get a "connection timed out" or garbled video for my PTZ cameras.
A: This can happen if the room has too little light. Please make sure that there is light enough or change the PTZ camera settings according to the Axis manual. To restore the connection press F5.

Q: The image is very choppy and / or out of synch and / or latency is very high
A: This happens if the network cannot handle the traffic properly, i.e. low bandwidth or unstable connection.

- Make sure you are using a wired 100 Mbit network or faster
- Cables are in good working order
- Network is not congested
- Alternatively you can lower the resolution of the cameras to lower bandwidth usage

If the video is played back on a low performance PC it may be the reason for the problems.

Q: I often have "Time out no data received" when I arrive in the morning?
A: Some cameras may give this problem when the images don't change, as in darkness, try to add an overlay with the data and time, this is done in the ASIX camera setup, using the operator mode.

Q: Not all of the USB camera settings work?
A: Try a lower frame rate, update the driver. Disabling the manufactures driver, and rely on the Microsoft embedded driver may solve the issue completely.

Q: SimView is not remembering my passwords.
A: Remembering passwords is a feature in the browser you are using (such as Internet Explorer or Firefox). If passwords are not being remembered it is most likely because of a user actively selecting not to save the password for this site. To reset this setting, you can try to clear the browser's cache settings or enquire with your IT whether policies are in place to stop you from remembering passwords. It may also be because you have used another address for the SimView Server, i.e. shifting between name and IP address.

Q: Patient Monitor video takes a very long time to show up in live view / Patient monitor plays ok in live view, but will not play back
A: Please make sure the quality is set to ***High*** in the Instructor application. Also check that the resolution of the PC monitor showing the Patient Monitor is set to less than 1920 * 1080.

Q: I get an error when clicking on ***Debrief*** in the instructor app:
"Access to the path 'c:\programData\Laerdal Medical\AVS Legacy Support…' is Denied"
A: To fix this:

1. Click on Windows button and type "%progamdata%\Laerdal Medical"
2. Right click on the folder called "AVS Legacy Support"
3. Select permissions
4. Grant full rights to all users

Q: Got error about not being able to connect to Laerdal Video Server message after reinstalling / upgrading my Instructor app.
A: After reinstalling or upgrading your Instructor app, you must reinstall the SimView Extension program.

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A list of acronyms used in the document.

PoE	Power over Ethernet
WiFi	Wireless internet
WLAN	Wireless Local Area Network
IP-Camera	Internet Protocol Camera
Ethernet	Network type
Switch	Network switch
Firewall	System to block unwanted access
LAN	Local Area Network
HTTP	Hyper Text Transfer Protocol
DNS	Domain Name Server
H.264	Video compression technique.
MJPEG	Motion JPEG
JPEG	Joint Photographic Experts Group
VBR	Variable Bit Rate
CBR	Constant Bit Rate
GOV	Group Of Video